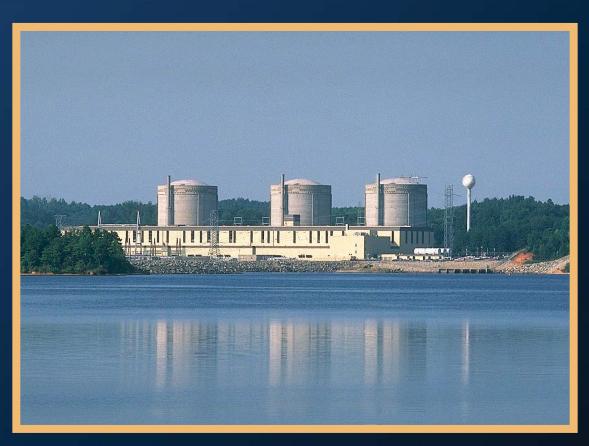
Appendices



Refueling a Nuclear Reactor



The Oconee nuclear station is located in Seneca, SC.



INSPECTOR GENERAL'S ASSESSMENT OF THE MOST SERIOUS MANAGEMENT AND PERFORMANCE CHALLENGES FACING THE NRC

OFFICE OF THE INSPECTOR GENERAL

September 28, 2007

MEMORANDUM TO: Chairman Klein

FROM: Hubert T. Bell

Inspector General

SUBJECT: INSPECTOR GENERAL'S ASSESSMENT OF THE MOST SERIOUS

MANAGEMENT AND PERFORMANCE CHALLENGES FACING THE NUCLEAR REGULATORY COMMISSION (OIG-07-A-20)

Dubert J. Seec

The Reports Consolidation Act of 2000 requires the Inspector General of each Federal agency to annually summarize what he or she considers to be the most serious management and performance challenges facing the agency and to assess the agency's progress in addressing those challenges. In accordance with the Act, I identified eight management and performance challenges that I consider to be the most serious. The list of eight challenges reflects the consolidation of the prior challenges 4 and 9 resulting in the following description for new challenge 4: Ability to modify regulatory processes to meet a changing environment, specifically the potential for a nuclear renaissance.

We appreciate the cooperation extended to us during this evaluation. The agency provided comments on this report, which have been incorporated, as appropriate. If you have any questions or comments about this report, please feel free to contact Stephen D. Dingbaum, Assistant Inspector General for Audits, at 415-5915 or me at 415-5930.

cc: Commissioner Jaczko Commissioner Lyons

APPENDIX A

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EXECUTIVE SUMMARY

Background

The Reports Consolidation Act of 2000 (the Act) requires the Inspector General (IG) of each Federal agency to annually summarize what he or she considers to be the most serious management and performance challenges facing the agency and to assess the agency's progress in addressing those challenges.

Purpose

In accordance with the Act, the IG at the Nuclear Regulatory Commission (NRC) updated what he considers to be the most serious management and performance challenges facing NRC. As part of the evaluation, the Office of the Inspector General staff sought input from NRC's Chairman, Commissioners, and NRC management to obtain their views on what challenges the agency is facing and what efforts the agency has taken to address previously identified management challenges.

Results In Brief

The IG identified eight challenges that he considers are the most serious management and performance challenges facing NRC. The challenges identified represent critical areas or difficult tasks that warrant high-level management attention.

In addressing this year's challenges we combined the prior challenge number 4, Ability to modify regulatory processes to meet a changing environment and the prior challenge number 9, Ability to meet the demand for licensing new reactors. The consolidation of these challenges resulted in the following description for new challenge 4: Ability to modify regulatory processes to meet a changing environment, specifically the potential for a nuclear renaissance. We combined the two challenges because the anticipated workload associated with preparing to receive and then review new reactor license applications will strain the agency's current resources and intensify other challenges in NRC's regulatory environment.

The chart that follows provides an overview of the eight most serious management and performance challenges as of September 28, 2007.

MOST SERIOUS MANAGEMENT AND PERFORMANCE CHALLENGES FACING THE NUCLEAR REGULATORY COMMISSION*

AS OF SEPTEMBER 28, 2007
(AS IDENTIFIED BY THE INSPECTOR GENERAL)

Challenge 1	Protection of nuclear material used for
	civilian purposes.

Challenge 2 Appropriate handling of information.

Challenge 3 Development and implementation of a risk-informed and performance-based

regulatory approach.

Challenge 4 Ability to modify regulatory processes to meet a changing environment, specifically

the potential for a nuclear renaissance.

Challenge 5 Implementation of information technology.

Challenge 6 Administration of all aspects of financial

management.

Challenge 7 Communication with external stakeholders

throughout NRC regulatory activities.

Challenge 8 Managing human capital.

Conclusion

The eight challenges contained in this report are distinct, yet are interdependent to accomplishing NRC's mission. For example, the challenge of managing human capital affects all other management and performance challenges.

The agency's continued progress in taking actions to address the challenges presented should facilitate successfully achieving the agency's mission and goals.

^{*} The most serious management and performance challenges are not ranked in any order of importance.

I. BACKGROUND

On January 24, 2000, Congress enacted the Reports Consolidation Act of 2000, requiring Federal agencies to provide financial and performance management information in a more meaningful and useful format for Congress, the President, and the public. The Act requires the Inspector General (IG) of each Federal agency to annually summarize what he or she considers to be the most serious management and performance challenges facing the agency and to assess the agency's progress in addressing those challenges.

II. PURPOSE

In accordance with the Act's provisions, the IG at the NRC updated what he considers to be the most serious management and performance challenges facing NRC. The IG evaluated the overall work of the Office of the Inspector General (OIG), the OIG staff's general knowledge of agency operations, and other relevant information to develop and update his list of management and performance challenges.

In addition, OIG sought input from NRC's Chairman, Commissioners, management and staff to obtain their views on what challenges the agency is facing and what current and future efforts the agency has taken to address previously identified management and performance challenges.

III. EVALUATION RESULTS

The NRC's mission is to "License and regulate the Nation's civilian use of byproduct, source, and special nuclear materials to ensure adequate protection of public health and safety, promote the common defense and security, and protect the environment." Like other Federal agencies, NRC faces management and performance challenges in carrying out its mission.

Determination of Management and Performance Challenges

Congress left the determination and threshold of what constitutes a most serious management and performance challenge to the discretion of the Inspectors General. As a result, the IG applied the following definition in identifying challenges:

Serious management and performance challenges are mission critical areas or programs that have the potential for a perennial weakness or vulnerability that, without substantial management attention, would seriously impact agency operations or strategic goals.

Based on this definition, the IG revised his list of the most serious management and performance challenges facing NRC. The challenges identified represent critical areas or difficult tasks that warrant high-level management attention. The following chart provides an overview of the eight management challenges. The sections that follow the chart provide more detailed descriptions of the challenges, descriptive examples related to the challenges, and examples of efforts the agency has taken or are underway to address the challenges.

Changes to Management Challenges

This year's challenges are essentially the same as last year, with two exceptions.

Description Change - Challenge 2

Last year's challenge 2: *Protection of information* was changed this year to *Appropriate handling of information*. The focus has been broadened to include emphasis on the importance of releasing information that the public has a right to know while protecting sensitive information that should not be released.

Integrating Challenges 4 and 9

Last year's challenge 9¹ and challenge number 4² were combined this year to form challenge number 4 which reads, *Ability to modify regulatory processes to meet a changing environment, specifically the potential for a nuclear renaissance.*

The prior two challenges were combined because the anticipated workload associated with preparing to receive and then review new reactor license applications will strain the agency's current resources and intensify other challenges in NRC's regulatory environment. While responding to the emerging demands associated with regulating new reactors, NRC must also sustain technical quality in carrying out its current regulatory responsibilities.

CHALLENGE 1

Protection of nuclear material used for civilian purposes.

NRC grants licenses for the possession and use of radioactive materials and establishes regulations to govern the possession and use of those materials. NRC's regulations require that certain materials licensees have extensive material control and accounting programs as a condition of their licenses. All other licensees (including those requesting authorization to possess small quantities of special nuclear materials) must develop and implement plans that demonstrate a commitment to accurately control and account for radioactive materials.

The issues related to this challenge and the agency's actions to address each issue include the following:

Issue: Ensure that radioactive material is adequately protected to preclude it from being used for malicious purposes.

Action: NRC is enhancing its materials licensing processes, which include a new policy that requires on-site visits before NRC issues new material licenses; is examining existing licenses to determine their legitimacy; and is forming a working group to update and revise existing materials guidance.

Issue: Develop and implement a system to ensure the accurate tracking of byproduct material, especially those materials with the greatest potential to impact public health and safety.

Action: NRC has published its final rulemaking on the National Source Tracking System (NSTS) and is working to develop and implement systems [NSTS and Web-based Licensing] for tracking materials and licenses.

Issue: Ensure reliable control and accounting of special nuclear materials in the NRC and Department of Energy's (DOE) jointly managed Nuclear Materials Management and Safeguards System (NMMSS).

Action: NRC has taken steps to ensure that licensees comply with material control and accounting (MC&A) requirements. For example, revisions to Inspection Manual Chapter 2800 and Temporary Instruction 2515/154 required that NMMSS book balances be compared to actual inventories possessed by reactor licensees as well as licensees holding small amounts of special nuclear materials.

Issue: Provide adequate inspection to verify the control and accountability of special nuclear materials at licensee sites.

Action: The staff proposed an MC&A rulemaking plan early in 2007 that will enhance MC&A regulations, inspections, and licensing.

Among the enhancements are requirements

¹ 2006 Management Challenge 9: Ability to meet the demand for licensing new reactors.

² 2006 Management Challenge 4: Ability to modify regulatory processes to meet a changing environment.

to conduct periodic inspections to verify that material licensees comply with MC&A requirements.

CHALLENGE 2

Appropriate handling of information.

NRC is required to appropriately protect and withhold information from public disclosure for reasons of security, personal privacy, or commercial or trade secrets protection. The agency also has a duty to release information the public has a right to know. NRC's goal is to strike an appropriate balance between a regulatory process that is open to the public and the protection from disclosure of sensitive information, which would be useful to potential adversaries. NRC traditionally has given the public access to a significant amount of information about the facilities and materials the agency regulates.³ The Atomic Energy Act, subsequent legislation, and various NRC regulations have given the public the right to participate in the licensing and oversight process for NRC licensees.

The issues related to this challenge and the agency's actions to address each issue include the following:

Issue: Ensure that information is released to the public that the public has a right to know.

Action: After receiving congressional criticism,
NRC gave the public access to documents
associated with a uranium spill that had been
previously designated as Official Use Only
(not releasable to the public). Further, the
Commission is reconsidering its policy and
criteria for withholding information from the
public.

Issue: Appropriately protect and withhold information from public disclosure, especially information related to personally identifiable information (PII), security related information and safeguards information (SGI).

Action: NRC has conducted searches and promptly removed all documents containing PII from public availability after inadvertent disclosure. In addition, NRC has established the PII Task Force to identify how PII is used and to develop policies and procedures to protect this information while minimizing the impact on agency operations. NRC's PII Task Force also developed a draft breach notification policy as required by the Office of Management and Budget.

Action: NRC issued SGI Fingerprinting Orders that require any person who seeks or obtains access to SGI to undergo a Federal Bureau of Investigation identification and criminal history check based on that individual's fingerprints.

CHALLENGE 3

Development and implementation of a risk-informed and performance-based regulatory approach.

NRC must increase its safety and security focus on licensing and oversight activities through the application of a balanced combination of experience, deterministic models, and probabilistic analysis. This approach is known as risk-informed and performance-based regulation. Incorporating risk analysis into regulatory decisions is intended to improve the regulatory process by focusing NRC and licensee attention and actions on the highest risk areas.

³ Openness has been and remains a cornerstone of NRC's regulatory philosophy.

The issues related to this challenge and the agency's actions to address each issue include the following:

Issue: Ensure that the appropriate level of focus on risk-informed and performance-based regulation is maintained.

Action: NRC is continuing its work to improve the agency's Risk-Informed and Performance-Based Plan,⁴ including a recent expansion of the Plan's objectives to more fully achieve a risk-informed and performance-based regulatory structure.

Issue: Develop and implement risk-informed and performance-based regulation for fuel cycle facilities.

Action: NRC is preparing a framework for the fuel cycle facility oversight program.

Issue: Ensure that the Reactor Oversight Process meets the agency's regulatory needs.

Action: NRC uses results of an annual self-assessment of the Reactor Oversight Process to better identify significant performance issues and to ensure that licensees take appropriate actions to maintain acceptable safety and security performance.

Issue: Ensure that research programs enhance the validity of current risk models, and also develop risk insights for new technologies, including program areas now transitioning to risk-informed regulation (e.g., fire protection).

Action: NRC is developing and implementing a formal written process for maintaining probabilistic risk assessment models that are sufficiently representative of the as-built, as-operated plants to support model uses.

CHALLENGE 4

Ability to modify regulatory processes to meet a changing environment, specifically the potential for a nuclear renaissance.

While NRC maintains its core regulatory programs, it must adapt to emerging changes in the regulatory environment. Specifically, the agency must maintain the rigor of its regulation of the current fleet of operating reactors while simultaneously preparing for an influx of applications for new reactors. Furthermore, the agency must be ready to regulate facilities using new fuel processing technologies and address issues relating to the disposal of increasing quantities of radioactive waste.

The issues related to this challenge and the agency's actions to address each issue include the following:

Issue: Maintain the ability to review operating reactor licensee applications for license renewals and power uprates submitted by industry in response to the Nation's demand for energy production.

Action: NRC is continuing its work with operating reactor plant licensees to develop a schedule of anticipated license amendment requests for license renewals and power uprates.

Issue: Develop and create the infrastructure necessary to support the review of new plant licensing applications, to include: reinstituting the Construction Inspection Oversight program, developing strong control processes for project management to ensure the agency meets its new reactor review and licensing objectives, developing technical review processes and ensuring that NRC implements a comprehensive standard review plan and adequately documented safety evaluation reports.

 $^{^4}$ The Risk-Informed and Performance-Based Plan was formerly known as the Risk-Informed Regulation Implementation Plan.

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Action: NRC is preparing for the expected receipt of utility applications for new reactor licenses.

NRC is issuing reactor design certifications, revising the regulation that governs early site permits, and engaging in ongoing interactions with plant vendors and utilities regarding prospective new reactor applications and licensing activities.

Issue: Ensure that Agreement State programs are adequate and compatible with NRC's program to protect public health and safety and the environment.

Action: NRC continues to conduct about 10-12 reviews per year of Agreement State radioactive materials programs under NRC's Integrated Materials Performance Evaluation Program.

Issue: Address increasing quantities of radioactive waste requiring interim or permanent disposal sites.

Action: NRC has conducted a review for dry cask waste storage systems.

Action: NRC is currently assessing its overall low-level waste program to prioritize ongoing and future staff actions and activities, along with associated schedules and resource estimates.

Issue: Prepare for and respond to delays and uncertainties related to its receipt and review of a DOE license application to construct a high-level radioactive waste repository at Yucca Mountain.

Action: NRC continues to prepare for receipt of DOE's license application to construct a high-level waste repository, which is expected in July 2008. NRC is focused on pre-licensing activities, issuing interim staff guidance, identifying the application review approach, and identifying review teams

CHALLENGE 5

Implementation of information technology.

NRC needs to upgrade and modernize its information technology (IT) capabilities both for employees and for public access to the regulatory process. Recognizing the need to modernize, the Office of Information Services established goals to improve the productivity, efficiency, and effectiveness of agency programs and operations, and enhance the use of information for all users inside and outside the agency.

The issues related to this challenge and the agency's actions to address each issue include the following:

Issue: Ensure that information systems are protected.

Action: NRC has made little progress in correcting the following two significant deficiencies concerning its Information System-wide Security Controls. Annual contingency plan testing is not being performed, and only 2 of 30 systems have been assessed to determine risks to agency operations, agency assets, or individuals, resulting in a failing grade from Congress for computer security. Although the agency is working towards certification and accreditation for all of its systems, the agency does not expect to accomplish this goal until the end of FY 2009. Actions also include awarding a multimillion dollar contract to enhance agencywide information systems security, documenting the process to complete certifications and accreditations of systems and categorizing systems as to sensitivity of the information.

Issue: Upgrade and manage IT activities to improve the productivity, efficiency, and effectiveness of agency programs and operations.

Action: NRC recognizes that it lags behind many other Federal agencies in terms of its IT infrastructure. For example, the ability to support technologies such as wireless and Microsoft Office suite, which is already the standard software used in the private sector and much of the public sector. In addition, the agency is evaluating options for replacing its aging applications such as the Agencywide Documents Access and Management System and Human Resources Management System. The agency has developed an information technology/information management strategic plan that addresses infrastructure planning and seeks a single, integrated infrastructure technology roadmap as part of an overall enterprise architecture transition plan.

Issue: Maintain a knowledgeable information technology staff.

Action: NRC is continuing to upgrade its IT infrastructure to a state of the art level, therefore, NRC must hire and retain staff who possess the required expertise. NRC has initiated new workforce planning strategies to address this, to include offering higher pay grades/salaries for needed proficiencies, keeping vacancy announcements indefinitely open to fill the many vacancies, and paying relocation expenses.

CHALLENGE 6

Administration of all aspects of financial management.

NRC management is responsible for establishing and maintaining effective internal controls and financial management systems that meet the objectives of

several statutes including the Federal Managers' Financial Integrity Act. This Act mandates that NRC establish controls that reasonably ensure that (1) obligations and costs comply with applicable law; (2) assets are safeguarded against waste, loss, unauthorized use, or misappropriation; and (3) revenues and expenditures are properly recorded and accounted for. This Act encompasses program operational, and administrative areas, as well as accounting and financial management.

The issues related to this challenge and the agency's actions to address each issue include the following:

Issue: Resolve the material weaknesses⁵ reported in the audit of NRC's financial statements and the issues related to licensee fee reporting.

Action: NRC is addressing the continuing material weakness by assessing all processes and system interfaces associated with the fee billing process and system to ensure controls are adequate. The agency has implemented a number of new and improved controls including a validation tool which analyzes and reconciles the completeness and accuracy of billing for reactors and materials inspections. As a result, the agency has decreased the risk of potential billing errors and further enhanced the control environment.

Action: NRC conducted a business process improvement study focused on time and labor and fee billing processes. The study made a number of recommendations for improvement including the need to corporately manage the reporting codes and to reduce the number of reporting codes to improve internal controls. As a result, the agency has developed interim guidance for managing reporting codes and expects to reduce the number of codes (currently totaling approximately 9,500) by another 1,000 before year-end.

⁵ FY 2006 financial statement internal control reportable conditions include a continuing material weakness regarding the Fee Billing System and a new material weakness regarding lack of required Information System-wide Security Controls. Discussion of the actions taken concerning the latter reportable condition is contained in Challenge 5 – Implementation of information technology.

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Issue: Replace NRC's current financial systems which are obsolete, overly complex, and inefficient.

Action: NRC has submitted a business case that recommended the replacement of five aging financial systems⁶ with a single integrated core financial system, expected to be operational in October 2009.

CHALLENGE 7

Communication with external stakeholders throughout NRC regulatory activities.

The NRC has stated that nuclear regulation is the public's business and, therefore, it should be transacted in an open and candid manner in order to maintain the public's confidence. The continuing challenge for management is to ensure that there are effective ways of communicating with external stakeholders. Effective communication is vital to the agency's ability to achieve its goals, to include enhancing the public's confidence in NRC's effectiveness as a regulator.

The issues related to this challenge and the agency's actions to address each issue include the following:

Issue: Ensure effective interaction with a diverse group of external stakeholders (e.g., industry, Congress, general public, other Federal agencies, citizen groups) by providing clear, accurate, and timely information about NRC's regulatory activities.

Action: NRC provides a quarterly report on the status of its licensing and other regulatory activities to the Senate Subcommittee on Clean Air and Nuclear Safety.

Action: NRC continues to hold public meetings throughout the year, as well as, an annual public Regulatory Information Conference on specific licensing and regulatory activities to share information with stakeholders.

Issue: Ensure compliance with the Freedom of Information Act (FOIA) regarding disclosure of information to the public, through both FOIA requests and FOIA automatic disclosure requirements, and timely responses to FOIA requests.

Action: NRC is implementing revised Internal
Commission Procedures to require a review
of Commission decision documents to
determine whether these documents should
be released, in whole or in part, in accordance
with the automatic disclosure provisions of
FOIA.

CHALLENGE 8

Managing human capital.

NRC's human capital needs will undergo changes due to the expected receipt of (1) applications to construct and operate the next-generation of nuclear reactors, (2) DOE's license application for a nuclear waste repository, and (3) industry applications to increase the number of fuel cycle facilities. By FY 2009, NRC will have hired approximately 1,200 new employees. Moreover, a United States Government Accountability Office report issued January 2007,⁷ found that about 16 percent of NRC employees are eligible to retire, a figure that is expected grow to 33 percent by FY 2010.

The issues related to this challenge and the agency's actions to address each issue include the following:

⁶ The five financial systems are Federal Financial System, Fee Billing System, Allotment/Allowance Financial Plan System, Cost Accounting System, and the Capitalized Property System.

⁷ Human Capital: Retirements and Anticipated New Reactor Applications Will Challenge NRC's Workforce, GAO-07-105, January 17, 2007.

Issue: Addressing anticipated increased workload demands and retirements.

Action: NRC is recruiting a skilled workforce that targets the anticipated changes facing the agency.⁸ The agency is on track to exceed its FY 2007 hiring goal of a net gain of approximately 200 staff.

Action: NRC is enhancing its reactor technology curriculum to meet the demand of its increased and varied workload which includes the review and licensing of the new generation of commercial nuclear reactors.

Action: NRC is implementing knowledge management⁹ strategies that include mentoring; early replacement hiring; rehiring annuitants with or without use of a pension offset as applicable¹⁰; and developing a knowledge management Web site, expressly for the purpose of retaining knowledge before key employees are promoted or retire.

Action: NRC is working with the General Services
Administration to acquire additional offsite office space near its headquarters, for up to 300 staff by the late summer of 2008.
Furthermore, most NRC regional offices are seeking new office space for additional staff in order to meet increased workload demands.

IV. CONCLUSION

The eight challenges contained in this report are distinct, yet are interdependent to accomplishing NRC's mission. For example, the challenge of managing human capital affects all other management and performance challenges.

The agency's continued progress in taking actions to address the challenges presented should facilitate successfully achieving the agency's mission and goals.

ATTACHMENT A - SCOPE AND METHODOLOGY

This evaluation focused on the IG's annual assessment of the most serious management and performance challenges facing the NRC. The challenges represent critical areas or difficult tasks that warrant high level management attention. To accomplish this work, the OIG focused on determining (1) current challenges, (2) the agency's efforts to address the challenges during FY 2007, and (3) future agency efforts to address the challenges.

The OIG reviewed and analyzed pertinent laws and authoritative guidance. In addition, OIG conducted interviews with agency officials at NRC Headquarters and conducted interviews by telephone with agency officials in the four NRC regional offices. The purpose of the interviews was to identify current performance and management challenges and steps taken by the agency to address these challenges through planning and in daily operations. Since challenges affect mission critical areas or programs that have the potential to impact agency operations or strategic goals, NRC Commission members, the Executive Director for Operations and the Chief Financial Officer were afforded the opportunity to share any information and insights on this subject.

OIG conducted this evaluation from June through August 2007. The major contributors to this report were Steven Zane, Team Leader, Beth Serepca, Team Leader, Sherri Miotla, Team Leader, Vicki Foster, Audit Manager, Michael Steinberg, Senior Auditor, and Lori Konovitz, Senior Analyst.

⁸ As of the last pay period in July 2007, there were approximately 3,526 NRC staff.

⁹ Knowledge management involves capturing critical information and making the right information available to the right people at the right time to assure that knowledge and experience of the current staff is passed on to the next generation of NRC staff.

¹⁰ This flexibility allows NRC to rehire a retiree to fill a position at full pay if the agency has experienced difficulty in filling a position, or if a temporary emergency exists.

NRC ACTIONS RESPONDING TO THE OFFICE OF THE INSPECTOR GENERAL'S MOST SERIOUS MANAGEMENT AND PERFORMANCE CHALLENGES

Below are the NRC's major FY 2007 actions taken in response to the Office of the Inspector General's eight most serious management challenges dated September 28, 2007. While the earlier appendix containing the Office of the Inspector General's management challenges described certain agency activities responding to those challenges, this section represents a more detailed explanation to describe the staff's actions.

CHALLENGE 1

Protection of nuclear material used for civilian purposes.

In FY 2007, the agency issued the proposed rule Regulatory Improvements to the Nuclear Materials Management and Safeguards System for public comment. This rule seeks improvement in the accuracy of inventory information for licensees' possession of special nuclear material (SNM) in the Nuclear Materials Management and Safeguards System (NMMSS) database. Currently, licensees possessing 350 grams or more of SNM are required to report their physical inventory results of SNM to the database. This proposed rule would require licensees possessing 1 gram or more of SNM to report their physical inventory to the NMMSS database and to reconcile their physical inventory results with the database. In addition, this proposed rule would require those licensees who have moved SNM into on-site waste type accounts to report and reconcile the quantity of inventory in these holding accounts with the database. If adopted, this proposed rule will help ensure that the NMMSS database contains the most accurate information possible for each licensee. In addition to regulations requiring that certain materials licensees have extensive material control and accounting, substantial work has also been done as well in the reactor safety program.

Additionally, in response to the NRC's request, the Department of Energy (DOE) has tasked the NMMSS operator to promptly process licensee inventory reports that are submitted for entry into the database. DOE has established a performance metric for the NMMSS operator to complete the reconciliation process between NMMSS and the licensee within 30 days of receipt of licensee inventory reports. The status of the reconciliation process for all licensees is documented in the monthly letter status report prepared by the NMMSS operator. Finally, the operator has established a process to notify each licensee regarding whether the licensee inventory reports and NMMSS database are in agreement, and if not, what actions are needed to rectify the inventory.

In May 2007, staff members from the U.S. Government Accountability Office (GAO) notified NRC staff of the results of an investigation where GAO staff was able to obtain a valid NRC radioactive materials license, authorizing the possession of portable gauges containing radioactive sources, using false information (e.g., company name, address, etc.). GAO staff was also able to modify the license using computer software to make it appear to authorize a much greater number of gauges than the original license. NRC immediately suspended the review of all new applications for materials licenses until interim corrective actions were implemented. In response to the GAO's investigation and resulting recommendations, NRC staff developed an action plan to address the efficiency of the interim actions, as well as detail on other longer-term modifications to the NRC's licensing process that would enhance the NRC's and the Agreement States' abilities to verify the validity of license applicants. Multiple groups have been tasked with reviewing the NRC's licensing process and recommending potential improvements. First, the Pre-Licensing Working Group was reconvened to recommend short-term fixes while longer-term solutions are being evaluated by two other groups. An independent, external review panel will analyze the NRC's overall materials security program, including a review of lower-risk sources. The other group to recommend longer-term solutions is the Materials Program Working Group, which will review the efforts of the first two groups and

make its own recommendations for improvements in the regulatory process. All three groups involve Agreement State participation.

Orders imposing requirements on transport of radioactive material in quantities of concern (RAMQC) were issued to licensees on July 19, 2005, and licensees were required to implement these orders by January 19, 2006. During FY 2007, the staff surveyed the regulated community to assess the impacts of the RAMQC orders. This survey did not identify any significant adverse issues with implementation of the RAMQC Order. The staff will next move towards incorporating these Orders into the 10 CFR Part 73 regulations.

In FY 2008, the staff will continue the development of the National Source Tracking System (NSTS) and maintenance of the Interim Source Database. Several rulemakings will be initiated in order to expand the NSTS, limit the amount of radioactive material that can be possessed by general licensees, and ensure security for the transportation of radioactive material. The staff also expects to issue a final rule specifying post-9/11 security requirements for a geologic repository operations area (GROA). This rule will amend the applicable NRC regulations to revise the security requirements and material control and accounting (MC&A) requirements for a GROA, and will include new requirements for specific training enhancements, improved access authorization, and enhancements to defensive strategies. The goal of this rulemaking is to ensure that effective security measures are in place for the protection of high-level radioactive waste.

CHALLENGE 2

Appropriate handling of information.

In FY 2007, the NRC established the Personally Identifiable Information (PII) Task Force to identify how PII is used at the NRC and to develop policies

and procedures to protect PII while minimizing the impact on agency operations. The objectives of the task force include: 1) identifying current data sources containing PII; 2) reviewing the use of social security numbers and other PII to reduce the collection and storage of PII; 3) recommending modifications to business processes and operations to protect PII; and 4) increasing staff awareness of PII issues, policies, and procedures. The NRC also created a "PII Project" Web site and maintains a site related to the NRC's Sensitive Unclassified Non-Safeguards Information (SUNSI) program on the NRC's intranet. The Web sites provide NRC staff with current information related to PII and SUNSI activities at the agency as well as links to the NRC's policy for SUNSI and PII.

The NRC completed a review of the agency's shared drives for PII to ensure it is adequately protected or removed, as appropriate. Also, the NRC developed a policy for future periodic reviews of the agency shared drives.

At the March 2007 Regulatory Information Conference, the NRC chaired a session regarding the agency's SUNSI program. This session focused on the four types of SUNSI that most affect external stakeholders who submit documents to the NRC: security-related information, proprietary information, PII, and information under the control of other Federal agencies, state and foreign governments, and international agencies. Emphasis was placed on the importance of protecting PII, the proper way to mark submitted documents, and submitter responsibilities.

The NRC issued Regulatory Issue Summary (RIS) 2007-04, "Personally Identifiable Information Submitted to the U.S. Nuclear Regulatory Commission," to enhance the awareness of permit holders and licensees about PII and the need to protect it from inappropriate disclosure. The RIS is available on the following Web site: http://www.nrc.gov/reading-rm/doc-collections/gen-comm/reg-issues/2007/ri200704.pdf.

In FY 2008, the NRC will establish and implement a plan to eliminate the unnecessary collection and

use of Social Security numbers, in response to Office of Management and Budget (OMB) memorandum (M-07-16), "Safeguarding Against and Responding to the Breach of Personally Identifiable Information." In addition, the NRC will determine: 1) whether any NRC contracts require contractors to obtain or possess PII; and 2) if so, whether such possession and use is critical to carry out the contract. Staff will continue to review agency shared drives to ensure that PII is adequately protected or removed. The PII Task Force will continue to identify ways to protect PII and implement changes required by OMB and the Office of Personnel Management (OPM). Finally, staff will continue to participate in the Interagency Best Practices Collaborative meetings sponsored by the Social Security Administration.

In FY 2007, after releasing information regarding a March 2006 spill of high-enriched uranium at a fuel facility, NRC revised its policy to increase the amount of information made publicly available due to security concerns. This policy change also reinforced the public's hearing rights under the Atomic Energy Act, Section 189A. In September 2007, NRC staff issued the Communication Plan for the Release of Redacted Licensing and Enforcement Documents for Fuel Facilities. In preparation for the September 2007 release of redacted documents, the staff reviewed past licensing actions for all license amendments processed from January 1, 2004, to present and identified whether any of the incoming licensee requests were classified documents. A list of licensing actions and security orders that have been redacted and made publicly available is posted on the NRC's public Web site at http://www.nrc.gov/about-nrc/regulatory/ adjudicatory/hearing-license-applications.html#7.

CHALLENGE 3

Development and implementation of risk-informed and performance-based regulatory approach.

The agency took significant steps in FY 2007 to enhance communication and implementation of risk-informed and performance-based initiatives. A Risk-informed Performance-Based Plan (RPP) was implemented to improve the existing approach and transform it into an integrated master plan for activities designed to help the agency achieve the Commission's goal of a holistic, risk-informed and performance-based regulatory structure. The agency has also increased its dialogue with stakeholders via more frequent public meetings to discuss implementation and policy concerns, and to clarify NRC positions.

The agency also made significant progress in the development of human reliability analysis (HRA)informed products to be used by staff involved with medical applications of byproduct materials. Specifically, based on feedback in previous reviews, the NRC revised HRA-informed training materials that, in combination with an HRA-informed job aid, are intended to help NRC staff to (1) better understand the potential causes of human errors in medical applications of byproduct materials, and (2) use this understanding to justify staff recommendations (e.g., approval of license applications or amendments, acceptance of licenseeproposed corrective actions). In FY 2008, the NRC plans to further develop the HRA-informed job aid, which currently is in prototype form, and to obtain feedback from potential users.

Enhancements to the Generic Issues Program (GIP) have been designed to ensure comprehensive and timely resolution of future generic issues. Implementation will be via a revision to Management Directive 6.4, "Generic Issues Program." The objective is to reserve for GIP review only those issues that have significant generic implications related to risk or security that cannot be more effectively handled by other regulatory programs and processes. The agency plans to employ enhanced risk-informed techniques developed from existing initiatives such as the Accident Sequence Precursor Program to improve the timely assessment of these generic issues.

During FY 2007, Revision 1 to Regulatory Guide 1.200, "An Approach for Determining the Technical Adequacy of Probabilistic Risk Assessment Results for Risk-Informed Activities," was issued. This

revision endorses the American Society of Mechanical Engineers (ASME) Probabilistic Risk Assessment (PRA) standard including the appendices addressing large early release frequency and peer review. This regulatory guide describes an acceptable approach for determining that the quality of a licensee's PRA, in total or limited only to those components used to support a licensing action, is expected to instill confidence in the reported PRA results sufficient to allow its use in risk-informed regulatory decision making for light-water reactors. The industry is expected to begin implementing this revised regulatory guide in FY 2008.

The agency completed a PRA of a dry cask storage system at an independent spent fuel storage installation in FY 2007. The study covered various phases of the dry cask storage process, from loading fuel from the spent fuel pool, preparing the cask for storage and transferring it outside the reactor building, to moving the cask to the storage pad and storing it there for 20 years. The study provides risk insights that will be used to further risk-inform license reviews in major technical disciplines and in the update of the Standard Review Plans (SRPs) for dry cask storage and storage facilities. Draft updated SRPs are expected to be issued for public comment in the last quarter of FY 2008.

In FY 2007, the NRC issued a 30-year license to United States Enrichment Corporation (USEC), Inc., to construct and operate a gas centrifuge facility at Piketon, Ohio. The staff performed a risk-informed and performance-based review of the application, allowing a timely review that focused on safety aspects of the facility design.

In FY 2008, the agency will continue working with the American Nuclear Society (ANS) and ASME in the development and endorsement of various PRA quality standards addressing fires, external events, and low power and shutdown operations. In addition, the agency will continue to develop guidance documents to improve the quality of PRAs in support of risk-informed decision-making. One

particularly complex area is the modeling of digital instrumentation and control systems in a PRA. In FY 2008, the agency will continue the development of models and methods for assessing the contribution to risk from digital instrumentation and control systems. Staff will also continue to develop improvements for the Standardized Plant Analysis Risk models used to support the reactor oversight process.

CHALLENGE 4

Ability to modify regulatory processes to meet a changing environment, specifically the potential for nuclear renaissance.

The NRC staff is engaged in numerous ongoing interactions with vendors and utilities regarding prospective new reactor applications and licensing activities. Based on these interactions, the staff expects to receive a significant number of new reactor combined operating license applications over the next several years and is currently developing the infrastructure necessary to support the application reviews.

The NRC has issued design certifications for four reactor designs that can be referenced in an application for a nuclear power plant and is currently performing the design certification review of General Electric's Economic Simplified Boiling Water Reactor design and the Westinghouse AP1000 design. In addition, staff is performing design certification preapplication reviews for AREVA's Evolutionary Power Reactor and Mitsubishi's U.S. Advanced Pressurized Water Reactor. Revised draft standard review plans (SRPs) were issued to design certification applicants in August 2007.

In August 2007, the NRC also issued revisions to the regulation governing early site permits (ESPs), design certifications, and combined licenses (10 CFR Part 52) to improve the effectiveness and efficiency of the licensing process for future applicants. The NRC has issued three ESPs thus far, to System Energy Resources, Inc., for the Grand Gulf site in Mississippi; to Exelon Generation Company, LLC, for the Clinton site in Illinois; and to Dominion Nuclear North Anna, LLC, for the North Anna site in Virginia. An ESP application from Southern Nuclear Operating Company for the Vogtle site in Georgia is currently under review.

The agency developed a Memorandum of Understanding (MOU) for consultation with the Department of Homeland Security (DHS) for new reactors under EPAct 2005 Section 657. This MOU was signed by the NRC and DHS in February 2007. Staff conducted monthly meetings with DHS to develop plans for implementation of the MOU and to ensure continuity of activities during this process.

In FY 2008, the NRC will continue to be a leader in developing programs to leverage the knowledge and resources within the international regulatory community in the licensing of new reactor designs. The NRC has played a key role in the Multinational Design Evaluation Program, an initiative through which several regulatory authorities share expertise and resources in reviewing new reactor designs, and are finding ways to harmonize codes, standards, and regulations for the review of future reactor designs.

In FY 2007, the NRC completed the first comprehensive review of Part 50 emergency preparedness regulations and guidance since the early 1980s, and has scheduled rulemaking, guidance, and generic communication modifications through 2010. The review incorporated extensive stakeholder involvement. Regulatory changes will codify prior orders, advisories, and information provided to licensees in response to the current threat environment.

The rising price of uranium has prompted considerable commercial interest in uranium production. In FY 2007, NRC staff was contacted by multiple companies stating their intent to submit up to 26 separate license applications for new insitu leach (ISL) and conventional facilities, or for

restarting or expanding existing facilities, in the FY 2007-2010 time frame. In FY 2007, in order to address the expected influx of new applications, the NRC developed and implemented an approach that focused on licensees developing high-quality applications, based on NRC staff facilitating early interactions and coordinating with interested parties. The staff requested that potential licensees provide letters of intent, indicating their plans to submit applications, to allow the staff to better plan and develop the infrastructure needed to support the application reviews. In FY 2007, the NRC received applications for expanding two facilities and restarting an existing facility. In early FY 2008, the NRC received one new application.

Licensing reviews for new uranium recovery facilities will be performed in accordance with applicable Standard Review Plans (SRPs) and other existing guidance, will include both a safety and an environmental review, and will be completed within a planned period of 24 months or less. In FY 2007, the staff developed an approach to prepare a Generic Environmental Impact Statement (GEIS) for ISL uranium recovery facilities. The GEIS will analyze the construction and operation of ISL facilities and discuss the potential environmental impact for reference resource areas that may be common to ISL facilities. Then, for each ISL facility application, a site-specific Environmental Assessment (EA) will be prepared that incorporates relevant conclusions from the GEIS and concentrates on potential environmental impacts that are unique to the proposed site. This approach should increase efficiency and minimize the potential for redundant and duplicative environmental analyses for proposed ISL facilities.

The agency expects to receive two license applications for new uranium enrichment plants in FY 2008. One proposed plant will utilize laser enrichment technology and the other will utilize gas centrifuge enrichment technology. NRC staff has completed two licensing reviews for uranium enrichment facilities in the past two years (Louisiana Energy Services

and United States Enrichment Corporation, Inc.). In completing these reviews, the staff utilized a SRP. Following each review, the staff completed a lessons learned exercise identifying future improvements in the licensing process. These process improvements will be implemented in the upcoming reviews.

CHALLENGE 5

Implementation of information technology.

In FY 2007, the NRC began planning for the modernization of the Agencywide Documents Access and Management System (ADAMS). Staff established an ADAMS Governance Structure to provide strategic direction and NRC user input. Additionally, staff assessed the security controls of the current ADAMS to ensure they are consistent with both National Institute of Standards and Technology (NIST) guidance and the NRC's security policy. In addition, ADAMS was enhanced to facilitate the new reactor license review process. This enhancement added the functionality to view links between ADAMS documents and to copy groups of documents to a workstation. ADAMS will be further enhanced to allow internal users to access ADAMS documents using a Web-based interface from their workstations.

In FY 2008, the NRC plans to implement information technology and business process improvements to manage Requests for Additional Information (RAIs) associated with licensing reviews and to improve internal capability for collaboration among NRC staff. In addition, the NRC will streamline the process used by the public to search for documents stored in the ADAMS public library. Upon completion of this project, all publicly available ADAMS documents will be searchable from the public Web site, and the public will no longer need to access ADAMS to search for documents. Finally, the NRC will continue to evaluate the options for replacing the underlying technology supporting ADAMS. The result of this effort will be a defined path forward for improving ADAMS.

In FY 2007, the first phase of the New Reactor Application Document Intake and Review Pilot was deployed to provide the capability for applicants to create and provide electronic Combined Operating License (COL) submittals to the NRC. Westinghouse successfully submitted a new reactor design control document (DCD) to the NRC in May 2007. The Westinghouse DCD consisted of 270 individual files with navigational links and was profiled into ADAMS in 2 hours. Manual processing of this DCD would have taken two days (160 work-hours) and would not have supported the navigational links. NRC staff consolidated guidance on how to submit documents electronically to the agency and issued it for public comment. The consolidated guidance includes a new chapter addressing COL submittals.

In FY 2007, the NRC developed and implemented information technology and business process improvements to automate the capture of e-mail comments into ADAMS as Official Agency Records on NRC proceedings such as the North Anna Early Site Permit. This information technology solution has also been configured to automate capture of e-mail relevant to hearing files in preparation for reactor license renewal hearings. In combination with business process improvements, this automated e-mail capture solution is allowing staff to effectively meet the challenges presented by high volumes of comment and discovery documents. During the initial comment period for the Vogtle Early Site Permit, savings of over 500 work-hours were identified by automating the processing of comments into ADAMS. The NRC achieved a full return on this investment in the first three months of implementation.

The NRC has streamlined the business process and improved the information technology supporting general adjudicatory hearings and the E-Filing rule. This rule, which will go into effect in FY 2008, will codify electronic filing and conduct of agency adjudicatory licensing hearings, including the hearings for reactor license renewals, materials licensing, and new reactor licensing.

In February 2007, staff completed a redesign of the NRC's public Web site. This redesign incorporated a new NRC banner and site-wide menu system, streamlined site content categories, and added a Google search function at the top of each page.

CHALLENGE 6

Administration of all aspects of financial management.

In FY 2007, for the sixth consecutive year, the NRC received the Certificate of Excellence in Accountability Reporting (CEAR Award) for the agency's Performance and Accountability Report. The CEAR Program, sponsored by the Association of Government Accountants, was established in conjunction with the Chief Financial Officers Council and the Office of Management and Budget. Its goal is to improve financial and program accountability by streamlining reporting and improving the effectiveness of such reports.

In FY 2007, the NRC received an unqualified audit opinion on its FY 2006 financial statements. The agency's independent auditors continued to characterize the NRC's legacy fee billing system as a material weakness and as a Federal Financial Management Improvement Act substantial noncompliance. The age of the system, reliance on manual processes, and lack of comprehensive quality assurance procedures are the underlying cause of the material weakness. The NRC is addressing the continuing material weakness by assessing all processes and system interfaces associated with the fee billing process and system to ensure controls are adequate. The agency has implemented a number of new and improved controls to include a validation tool which analyzes and reconciles the completeness and accuracy of billing for reactors and material inspections. As result, the agency has decreased the risk of potential billing errors and further enhanced the control environment.

In FY 2007, the NRC developed a number of internal control tools to mitigate the effects of these deficiencies. Improvements included further automating processes, conducting self and OMB Circular A-123 Appendix A assessments, standardizing billing certification procedures, strengthening quality control reviews, and conducting program reviews over certification processes.

The financial systems replacement project, as currently planned, involves the replacement and integration of the NRC's core accounting system, license fee billing system, cost accounting system, allotment/allowance financial plan system, and capitalized property system. During FY 2007, the agency developed the business case for its new financial system, for which final approval is expected by the end of the fiscal year. This included researching shared service providers and commercial off the shelf software for potential use. The new financial system has a target implementation date of October 1, 2009.

NRC conducted a business process improvement study focused on time and labor and fee billing processes. The study has made a number of recommendations for improvement including the need to corporately manage the reporting codes and to reduce the number of reporting codes to improve internal controls. To date, as a result, the agency has developed interim guidance for managing reporting codes and will reduce the number of codes by over 30 percent by year end.

In FY 2008, the agency is moving forward with the upgrade of the Time and Labor portion of its human resource management system. The upgraded system is due to be completed, including electronic signature capabilities, in FY 2009.

The NRC also procured a vendor to integrate a new Web-based budget system and tested it as a pilot during the FY 2009 PBPM process. The required system certification and accreditation is in its final review, and the approval and authorization to operate the new system is expected in FY 2008.

CHALLENGE 7

Communication with external stakeholders throughout NRC regulatory activities.

During FY 2007, the NRC continued to reach out and to work collaboratively with its many Native American Tribal stakeholders who have expressed concern and interest regarding NRC-related licensing activities. Throughout the year, representatives from the National Congress of American Indians (NCAI) met with NRC staff, as well as Chairman Klein, in order to discuss increased outreach and inclusiveness of Native American tribes on nuclear issues. Chairman Klein reinforced NRC's commitment to support and encourage Native American students to pursue advanced education in engineering and the sciences. In support of that commitment, NRC sponsored four Native American student interns through American University's Washington Internships for Native Students program. NRC staff also participated in several conferences in order to strengthen relations with Tribal stakeholders, such as the U.S. Department of Energy's Tribal Workshop held in Denver, Colorado, and the NCAI Mid-Year Conference in Anchorage, Alaska. Discussions focused on a variety of issues including economic development, natural resources, education, and the preservation of Native cultures. NRC conducted one of a series of scoping meetings on the Generic **Environmental Impact Statement for Uranium** Recovery Licensing in Gallup, New Mexico. This meeting included a number of Navajo participants, and NRC's presentations were translated into the Navajo language by a Navajo translator.

In FY 2007, the public was able to keep abreast of the NRC's reactor license renewal regulatory activities through a variety of open meetings, including advisory committee meetings and staff meetings open to the public. The NRC holds open meetings in the vicinity of plants undergoing license renewal reviews. These meetings are held to describe the license renewal process, solicit environmental scoping

issues, and to obtain comments on the environmental impact statement developed by the NRC. In addition, the license renewal section of the NRC public Web site describes the process, regulations, guidance, opportunities for public involvement, and status of current activities associated with renewal of licenses for commercial operating power reactors.

The NRC also continued an active stakeholder outreach program on spent fuel storage and transport. In addition to outreach on specific licensing requests and interaction with the industry, the NRC participated in meetings of the Northeast Governors Task Force, the Midwest States Task Force, the Western Governors Association, the Western Interstate Energy Board, and the Southern States Energy Board, and participated in multiple local and national meetings and conferences to discuss the NRC's safety regulations for the transportation and storage of spent nuclear fuel.

In June 2007, the NRC hosted a two-day seminar, the Fuel Cycle Information Exchange. This seminar provided an opportunity for licensees, NRC staff, and other stakeholders to exchange information and discuss issues of interest pertaining to the regulation of NRC-licensed fuel cycle facilities. The NRC is also making publicly available documents that were previously withheld regarding certain fuel cycle licensees, so that the public can remain aware of NRC activities at those sites.

The NRC also increased its outreach activities to external stakeholders in the areas of emergency preparedness and incident response. Stakeholder involvement in the emergency preparedness regulatory review and increased involvement with Federal, State, local, and Tribal incident response organizations through exercise participation are examples where the NRC broadened its outreach scope to enhance programs.

In FY 2007, interest in the uranium recovery area was high due to increasing uranium prices. The NRC held 17 public meetings regarding the uranium recovery area. In the decommissioning area, the NRC held a public roundtable meeting to discuss potential

rulemaking to reduce the likelihood of funding shortfalls for decommissioning under the license termination rule. Approximately 70 stakeholders and interested members of the public participated in this discussion. NRC staff also conducted an informal public meeting to discuss the decommissioning of the Shieldalloy Metalurgical Corporation site in Newfield, New Jersey.

The NRC continued to hold monthly conference calls with members of the Organization of Agreement States and the Conference of Radiation Control Program Directors to inform the States and glean the States' views on issues affecting them. Other calls were held with the respective executive boards of these organizations on urgent special topics of interest to the States.

The staff continued to emphasize stakeholder involvement and open communication regarding the Reactor Oversight Process (ROP). The staff used a variety of communication methods to ensure that all stakeholders had access to ROP information and were given an opportunity to participate in the process and provide feedback. The staff conducted monthly public working-level meetings with the Nuclear Energy Institute (NEI), the industry, and interested stakeholders to discuss ongoing refinements to the ROP. The staff also conducted public meetings in the vicinity of each operating reactor to discuss the results of the NRC's annual assessment of the licensee's performance. These meetings provided interested stakeholders with an opportunity to engage the NRC on plant performance and the role of the agency in ensuring safe plant operations. The staff sponsored a session at the Regulatory Information Conference (RIC) in March 2007 on the ROP, with a focus on implementation of safety culture enhancements, and discussed additional ROP topics during the regional breakout sessions. The staff also issued its annual external survey through the Federal Register in October 2006 to evaluate ROP effectiveness and gather stakeholder insights. Finally, the staff maintained and enhanced the NRC's Web pages to communicate current ROP-related information

and results. These outreach efforts have resulted in valuable feedback and ROP improvements.

Subsequent to the publication of the Power Reactor Security Requirements, at the beginning of FY 2007, several public meetings were held in various locations to provide an opportunity for the public to provide comments on the proposed rule and for licensees, other stakeholders, and NRC staff to exchange information on interpretation and implementation of specific areas of proposed regulations. When the public comment period closed, the agency had received over 600 pages of comments. Staff plans to conduct public meetings following the publication of draft guidance supporting this rule to facilitate understanding and allow interested stakeholders an opportunity to ask questions.

CHALLENGE 8

Managing human capital.

The NRC was ranked as the Best Place to Work in the Federal Government in the Office of Personnel Management's (OPM's) 2006 Federal Human Capital Survey. These rankings have created a baseline for measuring employee commitment and engagement and are being used to identify and concentrate on areas for improvement. As part of this continuous improvement effort and in light of NRC's current shifting age demographic, a series of staff focus groups will be conducted to go "behind the numbers" in the OPM survey to help understand the agency's strengths and areas for improvement in terms of attracting and retaining a highly skilled, engaged workforce. NRC staff members are conducting these focus groups, compiling the information gathered, and will present a proposed action plan to senior managers in FY 2008.

The NRC exceeded its FY 2006 hiring goal and is on track to exceed its FY 2007 goal to reach a net gain of approximately 200 staff. To achieve this goal, the

NRC maintains a vigorous recruitment program that includes participation in approximately 80 recruitment events each year at colleges, universities, and professional conferences as well as career invitational events. In FY 2007, the NRC began efforts to improve the recruitment and staffing program through: developing new recruitment displays and three videos of selected NRC employees to show at recruitment events; hiring additional staff to perform critical human resources work; and upgrading the agency's Web-based job application tool to gain more functionality.

The NRC continued its use of recruitment and relocation incentives, credit for non-Federal service toward annual leave earnings, salary exceptions, student loan repayment program and the provision of student lodging and transportation expenses to attract highly qualified candidates. The NRC implemented an expedited process to review a broader range of incentives in order to meet temporary emergency hiring needs and/or recruit and retain individuals in positions for which exceptional recruitment or retention difficulty exists. The NRC also continues to provide a wide range of flexible work options and employee-friendly programs and policies to attract and retain employees.

In FY 2007, the NRC used the Lean Six Sigma methodology to evaluate and develop recommendations for streamlining the hiring process (measured from the closing date of a vacancy announcement to the date an offer is extended). Efforts are underway to implement the recommendations made by the Lean Six Sigma workgroup and to develop a plan to assess the NRC's progress towards reducing the hiring time frame to meet a target of 45 days.

NRC offices and regions continued to play an important role in supporting the NRC's recruitment efforts to achieve a high quality, diverse workforce. For example, Region III implemented a successful recruitment strategy that included: recruiting at local colleges and universities; strengthening and developing relationships with targeted groups; and

expanding outreach to selected secondary and elementary schools in the Chicago area to encourage children to pursue careers in engineering and science through age-appropriate presentations in the classroom. The Office of Nuclear Material Safety and Safeguards (NMSS) reached out to the Nuclear Engineering Department Heads Organization and briefed the group at their June 2007 meeting in Boston. NMSS representatives took this opportunity to present NRC recruiting strategies and goals for FY 2008. Further, NMSS collaborated with the Office of Human Resources to develop a plan to obtain and sustain various technical expertise during the future review of the Yucca Mountain license application.

The Office of Human Resources partnered with the Office of New Reactors in FY 2007 to develop and deliver technical, professional development, and computer skills courses (e.g., advanced courses on the AP1000 and Advanced Boiling Water Reactor designs) for personnel involved in the review of new reactor licensing applications. In addition, the NRC is increasing space available in the Professional Development Center to provide two additional classrooms and technical training aid display areas to support increased technical and professional training for the new reactor program.

In FY 2007, the NRC continued to develop a Knowledge Management (KM) program to integrate new and existing approaches for generating, capturing, and transferring knowledge relevant to the NRC's mission. Currently, the agency's knowledge-sharing practices include formal and informal mentoring, storytelling, early replacement hiring, and rehiring annuitants expressly for the purposes of retaining knowledge and/or recovering lost knowledge. In addition, the agency continued to develop Communities of Practice ("CoPs"): groups of individuals who regularly interact to share knowledge regarding a particular topic, method, or work role. The agency is in the process of implementing virtual CoPs to provide communities with an online environment supported through commercial CoP software tools to facilitate knowledge sharing.

MANAGEMENT DECISIONS AND FINAL ACTIONS ON OIG AUDIT RECOMMENDATIONS

The agency has established and continues to maintain an excellent record in resolving and implementing audit recommendations presented in OIG reports. Section 5(b) of the Inspector General Act of 1978, as amended, requires agencies to report on final actions taken on OIG audit recommendations. The following table gives the dollar value of disallowed costs

determined through contract audits conducted by the Defense Contract Audit agency and NRC's Office of the Inspector General. Because of the sensitivity of contractual negotiations, details of these contract audits are not furnished as part of this report. As of September 30, 2007, there were no outstanding audits recommending that funds be put to better use.

MANAGEMENT REPORT ON OFFICE OF THE INSPECTOR GENERAL AUDITS WITH DISALLOWED COSTS FOR THE PERIOD OCTOBER 1, 2006—SEPTEMBER 30, 2007

Category	Number of Audit Reports	Questioned Costs	Unsupported Costs
 Audit reports with management decisions on which final action had not been taken at the beginning of this reporting period. 	0	\$0	\$0
Audit reports on which management decisions were made during this period.	1	\$193,585	\$0
Audit reports on which final action was taken during this report period.			
(i) Disallowed costs that were recovered by management through collection, offset, property in lieu of cash, or otherwise.	0	\$0	\$0
(ii) Disallowed costs that were written off by management.	0	\$0	\$0
Reports for which no final action had been taken by the end of the reporting period.	0	\$193,585	\$0

MANAGEMENT DECISIONS NOT IMPLEMENTED WITHIN ONE YEAR

Management decisions were made before October 1, 2006, for the OIG audit reports listed in the following tables. As of September 30, 2007, NRC did not take final action on some issues. Completion of the activities listed as "Actions Pending" will complete agency action on the listed OIG audit and evaluation recommendations.

GOVERNMENT PERFORMANCE AND RESULTS ACT: REVIEW OF THE FY 1999 PERFORMANCE REPORT (OIG-01-A-03) FEBRUARY 23, 2001

This audit was conducted at the request of the Chairman of the Senate Committee on Governmental Affairs to determine if NRC's FY 1999 performance data was valid and reliable and if the FY 2000 performance data would be more valid and reliable. The audit found that while NRC was improving and strengthening its performance reporting process, management control procedures required to produce valid and reliable data needed to be put in place as interim policy guidance and then institutionalized in an NRC management directive.

Open Recommendations

1. Develop an NRC management directive (MD) to provide the management controls needed to ensure that NRC produces credible Government Performance and Results Act (GPRA) documents.

Include guidance on reporting unmet goals in both the management directive and the interim policy guidance on implementing GPRA initiatives

Actions Pending

Interim guidance for performance management and reporting performance information was issued in July 2001. In July 2002, a new MD and Handbook 4.8, Performance Measurements, was issued for intra-agency review and comment. It was subsequently decided that performance measurement should be addressed in the broader context of budget and performance integration. Therefore, new MD 4.8 is being incorporated into a revision of MD and Handbook 4.7, which will be entitled Planning, Budgeting, and Performance Management. Revised MD 4.7 will clarify the roles and responsibilities in setting the agency's strategic direction, determining planned activities and resources, measuring and monitoring performance, and assessing performance. The revised management directive and handbook is expected to be issued in February 2008.

REVIEW OF THE AGENCYWIDE DOCUMENTS ACCESS AND MANAGEMENT SYSTEM (OIG-02-A-12) JUNE 12, 2002

This audit was conducted to determine how effectively NRC carried out the Chairman's request for an assessment of the effectiveness and efficiency of the Agencywide Documents Access and Management System (ADAMS), the electronic system that maintains official NRC records, and to assess what additional NRC actions are required to make ADAMS successful. The audit found that NRC needed to improve ADAMS management controls.

Open Recommendation

Finalize and issue Management Directive (MD) 2.5, Application Systems Life-Cycle Management and Handbook 2.5, System Development and Life-Cycle Management Methodology.

Action Pending

A new MD 2.8, Project Management Methodology– superceding MD 2.1, Information Technology Architecture, MD 2.2, Capital Planning and Investment Control, and previously issued draft MD 2.5–was issued in June 2007. OIG's review of NRC actions taken and closure was pending at the time of the FY 2007 Performance and Accountability Report's preparation.

REVIEW OF NRC'S HANDLING AND MARKING OF SENSITIVE UNCLASSIFIED INFORMATION (OIG-03-A-01) OCTOBER 25, 2002

This audit was conducted to assess NRC's program for the handling, marking, and protection of Official Use Only (OUO) information, a category of sensitive unclassified information. The audit found that NRC's program and guidance for the handling and marking of sensitive unclassified information may not adequately protect OUO information from inadvertent public disclosure and that training on handling and protecting sensitive unclassified information is not provided to all NRC employees and contractors on a regular basis.

Open Recommendations

1. Update the guidance for OUO documents to require clear identification of sensitive unclassified information to prevent its inadvertent disclosure.

2. Mandate consistent use of defined markings on documents containing OUO information and clarify the markings that should be used on sensitive unclassified information.

Actions Pending

Agency corrective actions require issuance of a revised management directive (MD) covering sensitive unclassified, non-safeguards information (SUNSI) and a new MD covering safeguards information (SGI). It is expected that the new MD on SGI will be issued by December 2007. With respect to SUNSI, the staff is developing a proposed policy, which is scheduled to be provided to the Commission for review and approval by the end of June 2008. Following receipt of the Commission's guidance on the proposed policy, the staff will develop the revised MD on SUNSI, which is expected to be issued by the end of December 2008.

USE OF ELECTRONIC MAIL AT NRC (OIG-03-A-11) MARCH 21, 2003

This audit was conducted to determine whether NRC has an adequate process for ensuring that appropriate items of electronic mail (e-mail) correspondence become official agency records, adequate policies and procedures covering the use of its e-mail system, and employee and contractor use of the e-mail system is consistent with agency policy. The audit found that adequate controls for ensuring that appropriate e-mail records become official agency records have not been implemented, and while NRC employees generally use the e-mail system for official business or limited personal use in accordance with agency policy, contractors do not follow the more stringent e-mail usage policy applicable to them.

Open Recommendation

Revise "Management Directive and Handbook 3.53, NRC Records Management Program," to include current information about capturing e-mail records in the Agencywide Documents Access and Management System (ADAMS).

Action Pending

The revised management directive and handbook was issued in March 2007. OIG's review of NRC actions taken and closure was pending at the time of the FY 2007 Performance and Accountability Report's preparation.

AUDIT OF NRC'S REGULATORY OVERSIGHT OF SPECIAL NUCLEAR MATERIALS (OIG-03-A-15) JUNE 3, 2003

This audit was conducted to determine whether NRC adequately ensures its licensees control and account for special nuclear material (SNM). The audit found that NRC's current levels of oversight of licensees' material control and accounting (MC&A) activities do not provide adequate assurance that all licensees properly control and account for SNM in that NRC performs only limited inspections of licensees' MC&A activities and cannot assure the reliability of data in the Nuclear Materials Management and Safeguards System, which is a computer database managed by the U.S. Department of Energy and jointly used with NRC as the national system for tracking certain private- and Government-owned nuclear materials.

Open Recommendations

1. Conduct periodic inspections to verify that material licensees comply with MC&A requirements, including but not limited to visual inspections of licensees' SNM inventories and validation of report information.

- 3. Document the basis of the approach used to risk-inform NRC's oversight of MC&A activities for all types of materials licensees.
- 4. Revise NRC regulations to require licensees authorized to possess SNM, and not currently required to do so, to conduct annual inventories and submit an annual Material Status Report or Physical Inventory Summary Report to NRC.

Actions Pending

NRC expects to issue a proposed rule by June 2009, with issuance of the final rule by December 2010, to make enhancements to MC&A regulations, inspections, and licensing process. The work on this rulemaking will include documentation of the technical basis for risk-informing the MC&A program and how it will be applied to the program. By July 2011, NRC expects to have completed the application of risk-informing the MC&A program with respect to determining inspection resources and frequencies for all types of materials licensees MC&A inspections for SNM.

A proposed rule was published for public comment in February 2007. NRC expects to issue a final rule in the spring of 2008, to require all licensees possessing one gram or more of SNM to submit a completed Material Status Report and Physical Inventory Listing to NRC annually.

REVIEW OF NRC'S DRUG-FREE WORKPLACE PLAN (OIG-04-A-15) MAY 24, 2004

The audit of NRC's Drug Testing Program (discussed further in the table on OIG-05-A-05) found that the NRC's Drug-Free Workplace Plan was not in compliance with Federal guidance that requires the plan to receive U.S. Department of Health and Human Services' (HHS's) approval and that it was missing a required clause.

Open Recommendations

1. Revise the NRC Drug-Free Workplace Plan to include the deferral-of-testing clause from the HHS's Model Plan for a Comprehensive Drug-Free Workplace Program.

- 2. Include in the NRC Drug-Free Workplace Plan instruction that revisions must receive approval from the HHS prior to implementation.
- 3. Obtain HHS's approval of the 2004 NRC Drug-Free Workplace Plan prior to implementation.

Actions Pending

The plan was revised to include the deferral-of-testing clause and an instruction that plan revisions must receive approval from HHS prior to implementation. HHS approved the NRC's plan on August 24, 2007. NRC considers action in response to these recommendations to be complete, although closure requires OlG's review of HHS's approval of the final updated plan, which is expected in early FY 2008.

AUDIT OF NRC'S INCIDENT RESPONSE PROGRAM (OIG-04-A-20) SEPTEMBER 23, 2004

This audit was conducted to determine whether NRC's incident response program is performed in a timely and effective manner, provides adequate support to licensees, and maintains readiness and qualifications of staff. The audit found that while NRC has improved its program since the Three Mile Island 2 accident on March 29, 1979, more needed to be done to ensure that the program is performed consistently, is more fully understood by licensees, and maintains a well-defined process for demonstrating staff are qualified and ready to respond.

Open Recommendations

3. Update NUREG-0845, "Agency Protocols for the NRC Incident Response Plan," or incorporate relevant portions into other agency procedures.

- 4. Periodically review regional incident response programs to ensure NRC's incident response program is carried out consistently across the agency.
- 8. Periodically conduct incident response exercises involving multiple sites.

- 11. Revise the NRC Incident Response Plan to better define the incident response to emergencies involving regulated fuel cycle facilities and nuclear materials.
- 13. Update response technical manual (RTM) supplements for gaseous diffusion plants.

Actions Pending

NUREG-0728, "NRC Incident Response Plan," Revision 4, which was issued for interim use effective April 14, 2005, supersedes NUREG-0845. The relevant portions of NUREG-0845 have been incorporated into NUREG-0728 and its implementing procedures. All revised implementing procedures are expected to be completed by September 1, 2008.

Implementation of the Incident Response Self-Assessment Program began with the development of a draft self-assessment plan that was tested in NRC Region II during the week of October 15, 2007, in concert with the McGuire full-participation exercise. Plans for instituting self-assessments in all of the NRC Regions are expected to be completed by December 2008.

In order to test the key elements of Incident Response Manual Chapter (IRMC) 0920, "Incident Response-Multiple Incidents," NRC conducted a multiple-event tabletop exercise in March 2006 that included participation by all of the NRC regional offices. On March 21, 2007, during the Dresden Exercise, the NRC successfully demonstrated its ability to conduct a multiple-incident exercise. After further review, the NRC has determined that IRMC 0410, "NRC Drill and Exercise Standards," is the appropriate document to capture the requirement. IRMC 0410 will be revised by January 31, 2008, to include a requirement for multi-incident exercises once per year.

After review of the "NRC Incident Response Plan" (NUREG-0728), the NRC staff determined that the IRMCs for fuel cycle facilities and subsequent response procedures are the appropriate location for incident response guidance on fuel cycle facilities. The IRMCs for fuel cycle facilities and associated response procedures are currently under construction and are expected to be issued by March 31, 2008.

The NRC staff has begun an effort to update the RTM supplements for the gaseous diffusion plants (GDPs). The effort is focused on evaluating pertinent information, such as locations and quantities of uranium hexaflouide (UF6), which would affect the NRC's event assessments should an accident occur. After site visits to the GDPs in May 2007, the staff began to evaluate the information in the current RTM supplements and UF6 inventories at the plants in order to determine whether related information in the RTM supplements would be effective for event assessment activities. The results of the evaluation will be used to identify what revisions to the RTM supplements are warranted. Any revisions are expected to by completed by December 2007.

SYSTEM EVALUATION OF THE AGENCYWIDE DOCUMENTS ACCESS AND MANAGEMENT SYSTEM (OIG-04-A-21) OCTOBER 21, 2004

This evaluation was conducted as part of the OIG's review of NRC's implementation of the Federal Information Security Management Act (FISMA) for FY 2004, with the objectives of reviewing and evaluating the management, operational, and technical controls for NRC's Agencywide Documents Access and Management System (ADAMS). The review found that ADAMS security documentation was not always consistent with National Institute of Standards and Technology (NIST) guidelines, security protection requirements were not consistent within the security documentation, and findings and recommendations resulting from testing were not consistently tracked.

Open Recommendations

Actions Pending

- 1. Update the ADAMS Risk Assessment Report to be consistent with NIST Special Publication 800-30, "Risk Management Guide."
- The ADAMS Risk Assessment Report was updated as part of the ADAMS security certification and accreditation to be consistent with the applicable NIST and NRC guidance. The final ADAMS Risk Assessment Report was approved by the NRC's Senior Information Technology Security Officer (SITSO) on January 23, 2007. NRC considers action in response to this recommendation to be complete, although closure requires OIG's verification that the ADAMS Risk Assessment Report is consistent with NIST Special Publication 800-30, and is expected in early FY 2008.
- 2. Update the ADAMS Security Plan to describe all controls currently in place. In-place controls are those marked at least at Level 3 in the self-assessment and that were documented as passed in the last Security Test and Evaluation Report or in any test and evaluation on controls added since publication of that report.
- Update of the ADAMS Security Plan was dependent on a completed ADAMS Risk Assessment Report. The final ADAMS Risk Assessment Report was approved by the NRC's SITSO on January 23, 2007. The ADAMS Security Plan was updated as part of the ADAMS security certification and accreditation, to describe all controls in place. The ADAMS Security Plan was completed on August 8, 2007. NRC considers action in response to this recommendation to be complete, although closure requires OIG's verification that the final updated plan describes all controls in place, and is expected in early FY 2008.
- 4. Update the ADAMS Business Continuity Plan to include the following changes:
 - Describe the methods used to notify recovery personnel during business and non-business hours.
 - Incorporate all teams' roles and responsibilities and relevant points of contact information for team leaders, alternate team leaders, and team members for all scenarios.
 - Include procedures for restoring system operations with a focus on how to clean the alternate site of any equipment or other materials belonging to the organization.

The ADAMS Business Continuity Plan (BCP) is being updated as part of the ADAMS certification and accreditation, and will include the recommended changes. The BCP is dependent on a completed and approved security plan. The BCP is expected to be updated by November 1, 2007.

continued

SYSTEM EVALUATION OF THE AGENCYWIDE DOCUMENTS ACCESS AND MANAGEMENT SYSTEM (OIG-04-A-21), CONTINUED

Open Recommendations

Actions Pending

5. Update the ADAMS Security Plan and/or ADAMS self-assessment to consistently define the protection requirements (confidentiality, integrity, availability).

Update of the ADAMS Security Plan was dependent on a completed ADAMS Risk Assessment Report. The final ADAMS Risk Assessment Report was approved by the NRC's SITSO on January 23, 2007. The ADAMS Security Plan was updated as part of the ADAMS security certification and accreditation to define all the controls currently in place, including the protection requirements. The ADAMS Security Plan was completed on August 8, 2007. NRC considers action in response to this recommendation to be complete, although closure requires OIG's verification that the ADAMS Security Plan and/or ADAMS self-assessment consistently defines the protection requirements, and is expected in early FY 2008.

 Track all action items resulting from testing of the ADAMS security controls and contingency plan in either the agency's internal tracking system or the agency's plan of action and milestones (POA&M). All items resulting from testing of the ADAMS security controls and contingency plan will be placed in either Rationale Clear Case, NRC's internal tracking system, or in the NRC's FISMA plan of action and milestones (POA&M) submitted to OMB. Rational Clear Case will be updated to track all action items as results become available. The test results are expected to be documented by November 1, 2007.

INDEPENDENT EVALUATION OF NRC'S IMPLEMENTATION OF THE FEDERAL INFORMATION SECURITY MANAGEMENT ACT FOR FY 2004 (OIG-04-A-22) SEPTEMBER 30, 2004

This was an independent evaluation of NRC's implementation of the Federal Information Security Management Act for FY 2004. The review found that while NRC had made improvements to its automated information security program, additional improvements were needed.

Open Recommendations

Actions Pending

Five of the original 16 recommendations remain open.

Due to the sensitive nature of the OIG's review and recommendations in this area, specific details are not furnished as part of this report. As of September 30, 2007, completion of agency actions on this OIG audit report requires re-certification and re-accreditation of some systems and updating of a business continuity plan. These action are being completed in accordance with a prioritization of information technology security activities, which is based on a mission perspective and security risk. Consequently, most of these activities are expected to be completed in the first half of FY 2008, but completion of the re-certification and re-accreditation work will be delayed until early FY 2009. These agency actions will be carried over to and tracked to completion via NRC's FY 2008 Plan of Action and Milestones required by the Federal Information Security Management Act.

SYSTEM EVALUATION OF THE GENERAL LICENSE TRACKING SYSTEM (OIG-04-A-24) OCTOBER 21, 2004

This evaluation was conducted as part of the OIG's review of NRC's implementation of the Federal Information Security Management Act for FY 2004, with the objectives of reviewing and evaluating the management, operational, and technical controls for the General License Tracking System (GLTS), the primary function of which is to facilitate the tracking and accountability of NRC general licensees and generally licensed devices. The review found that the GLTS's security documentation did not always follow required guidelines, security protection requirements were not consistent within the security documentation, and NRC was not tracking all action items resulting from testing the system's security controls.

Open Recommendations

Actions Pending

- 1. Update the GLTS Security Plan to describe all controls currently in place. In-place controls are those marked at least at Level 3 in the self-assessment and that were documented as passed in the last Security Test and Evaluation Report, or in any test and evaluation on controls added since publication of that report.
- A task order was issued for the completion of the certification and accreditation process and preparation of deliverables in compliance with National Institute of Standards and Technology (NIST) and Federal Information Security Management Act (FISMA) guidance for the GLTS. The initial kick-off meeting for this work is expected to be held by December 31, 2007. One product required of the contractor at the kick-off is a draft project plan and schedule. Completion of the kick-off, project plan, and schedule will provide the target dates for completion of each security artifact, including the GLTS System Security Plan (SSP). The updated SSP resulting from this effort will take into account the requirements for full description of all in-place controls. However, the period of performance for the task order is through September 25, 2008, by which time it is expected that the updated SSP will be completed.
- 3. Update the GLTS Business Continuity Plan.
- The task order discussed above for Recommendation 1 was issued to accomplish deliverables in compliance with NIST and FISMA guidance. The completion date for the updated GLTS Contingency (Business Continuity) Plan will not be known until the kick-off meeting, which is expected to be held by December 31, 2007. The Contingency Plan can be completed up to 180 days after receiving the Authority to Operate (ATO) the system. Completion of the kick-off meeting and documentation leading to a successful ATO will determine the target date for completion of the update of the GLTS Contingency Plan. However, the period of performance for the task order is through September 25, 2008, by which time it is expected that the updated Contingency Plan will be completed.
- 4. Update the GLTS Security Plan and/or GLTS self-assessment to consistently define the protection requirements (confidentiality, integrity, availability).
- During development of the updated GLTS SSP, the contractor will be alerted to the need to ensure consistency in defining the protection requirements. As discussed above for Recommendation 1, completion of the kick-off, project plan, and schedule will provide the target dates for completion of each security artifact, including the GLTS System Security Plan (SSP). However, the period of performance for the task order is through September 25, 2008, by which time it is expected that the updated SSP will be completed.

AUDIT OF NRC'S DRUG TESTING PROGRAM (OIG-05-A-05) DECEMBER 30, 2004

This audit was conducted to assess the NRC's implementation of its drug testing program, and identified that improvements were needed in the program's random testing process and management oversight.

Op	en Recommendations	Actions Pending
4.	Revise the categories of testing-designated positions to include computer system administrators and individuals engaged in law enforcement activities who are authorized to carry weapons.	On September 29, 2006, the Commission decided to revise the drug testing pool to include all NRC employees. Appropriate changes were incorporated in the NRC Drug-Free Workplace Plan to reflect this decision and the plan was submitted to the U.S. Department of Health and Human Services (HHS) for review and approval. HHS approved the NRC's plan on August 24, 2007. As a result of this approval, the staff has prepared a revised implementation plan (with dates for various actions to be completed) which calls for implementation of the revised NRC Drug-Free Workplace Plan 250 days after HHS's approval of the plan, i.e., by August 25, 2008. Closure of this recommendation requires OIG verification that NRC has implemented the revised NRC Drug-Free Workplace Plan with this provision.
5.	Re-evaluate categories of testing-designated positions and continue to do so biennially.	The NRC Drug-Free Workplace Plan was approved by HHS on August 24, 2007, and provides for the testing-designated position criteria to be reviewed and revised as appropriate on a biennial basis. Closure of this recommendation requires OIG verification that NRC has implemented the revised NRC Drug-Free Workplace Plan with this provision.
12.	Update the Management Directive System to include the drug testing policy and procedures that employees are expected to follow.	With HHS's approval of NRC's plan on August 24, 2007, a new management directive (MD) that will describe the NRC's drug testing policy and provide an overview of the procedures that employees are to follow is expected to be issued by August 2008. Closure of this recommendation requires OIG evaluation of the revised MD containing the drug testing policy and procedures that employees are expected to follow.

SYSTEM EVALUATION OF THE INTEGRATED PERSONNEL SECURITY SYSTEM (OIG-05-A-08) JANUARY 26, 2005

This evaluation was conducted as part of the OIG's review of NRC's implementation of the Federal Information Security Management Act for FY 2004, with the objectives of reviewing and evaluating the management, operational, and technical controls for the Integrated Personnel Security System (IPSS), which replaced NRC employee security information contained in paper files and in a less-capable automated data system. The review found that the IPSS's security test and evaluation were not comprehensive and independent, security documentation was not always consistent with National Institute of Standards and Technology (NIST) guidelines, and security protection requirements were not consistent within the security documentation.

Open Recommendations	Actions Pending
 Re-certify and re-accredit IPSS based on an independent, comprehensive, and fully documented assessment of all management, operational, and technical controls. 	Completion dates have been established in order to integrate the certification and accreditation of IPSS with the implementation of Homeland Security Presidential Directive 12 and to allow time for resolution of operational issues. Therefore, certification and accreditation of IPSS is expected to be completed by March 31, 2008.
Update the IPSS Risk Assessment Report to include listed changes.	The IPSS Risk Assessment Report is expected to be updated to include the specified items by December 31, 2007.
3. Update the IPSS System Security Plan to include listed changes.	The IPSS Security Plan is expected to be updated to include the specified items by December 31, 2007.
4. Update the IPSS System Security Plan to include a section on planning for security in the life cycle and a section on incident response capability.	The IPSS Security Plan is scheduled to be updated by December 31, 2007 and will include sections on planning for security in the life cycle and incident response capability.
5. Update the IPSS System Security Plan to describe all controls currently in place. Inplace controls are those marked at least at Level 3 in the self-assessment and that were documented as passed in the last Security Test and Evaluation Report, or in any test and evaluation on controls added since publication of that report.	The IPSS Security Plan is expected to be updated by December 31, 2007 and will describe all controls currently in place.
7. Update the IPSS Contingency Plan to include listed changes.	The IPSS Contingency Plan is expected to be updated by December 31, 2007 to include the specified items.
8. Update the IPSS System Security Plan and/or IPSS self-assessment to consistently define the protection requirements (confidentiality, integrity, availability).	The security plan and IPSS self-assessment are expected to be updated by December 31, 2007 to consistently define protection requirements.

AUDIT OF NRC'S BUDGET FORMULATION PROCESS (OIG-05-A-09) FEBRUARY 9, 2005

This audit was conducted to determine whether the budget formulation portion of the NRC's Planning, Budgeting, and Performance Management process is effectively used to develop and collect data to align resources with strategic goals and efficiently and effectively coordinated with program and support offices. The audit identified that NRC effectively develops and collects data to align resources with strategic goals, prepares the budget in alignment with the Strategic Plan, and successfully conducts Office of Management and Budget-required Program Assessment Rating Tool evaluations, but needed additional internal coordination and communication efforts.

Open Recommendations

Clarify the roles and responsibilities of the Chief Financial Officer and the Executive Director for Operations in the budget formulation process.

- 2. Document the decision-making process and roles and responsibilities of the Program Review Committee.
- Document the budget formulation process to ensure a logical, comprehensive sequencing of events that provides for obtaining early Commission direction and approval.

Actions Pending

In July 2007, the NRC staff provided a Program Review Committee Charter to the Commission for review and approval. A revision of Management Directive 4.7, Planning, Budgeting, and Performance Management, will clarify roles and responsibilities and document the budget formulation process, including decision-making, and will provide for a logical, comprehensive sequencing of events for obtaining early Commission direction and approval. The revised management directive and handbook is expected to be issued in February 2008.

AUDIT OF NRC'S TELECOMMUNICATIONS PROGRAM (OIG-05-A-13) JUNE 7, 2005

This audit was conducted to evaluate controls over the use of NRC telecommunications services and the physical security of NRC telecommunications systems, and found that improvements were needed to strengthen controls over the use of telecommunications services and the physical security of NRC telecommunications systems.

Open Recommendations

Actions Pending

3. Revise Management Directive and Handbook 2.3 to include effective management controls over NRC Headquarters staff use of agency telecommunications services.

The revised management directive and handbook is in final concurrence and is expected to be issued by January 31, 2008.

AUDIT OF NRC'S DECOMMISSIONING PROGRAM (OIG-05-A-17) SEPTEMBER 30, 2005

This audit was conducted to determine whether NRC's decommissioning program achieves desired performance results as stated in the Strategic Plan and reported in the Performance and Accountability Report. The audit identified that while NRC's decommissioning program has processes in place to monitor, evaluate, and report on performance, some performance results could not be verified. In addition, the audit found that although most of the recommendations from an FY 2003 self-evaluation of the program were implemented, progress to implement a few was minimal.

Open Recommendations

Actions Pending

 Clarify and disseminate expectations for generating and maintaining supporting documentation for performance data to staff responsible for preparing and collecting performance data. Revised Management Directive 4.7, "Planning, Budgeting, and Performance Management," will include clarifications of expectations for generating and maintaining supporting documentation for performance data. The revised management directive and handbook is expected to be issued in February 2008.

SYSTEM EVALUATION OF SECURITY CONTROLS FOR STANDALONE PERSONAL COMPUTERS AND LAPTOPS (OIG-05-A-18) SEPTEMBER 30, 2005

This evaluation was conducted as part of the OIG's review of NRC's implementation of the Federal Information Security Management Act for FY 2005, with the objectives of evaluating the effectiveness of NRC security policies, procedures, practices, and controls for standalone personal computers (PCs) and laptop computers. The review found that security controls for standalone PCs and laptops were not adequate, that the devices were not monitored for compliance with Federal regulations, and agency information technology coordinators' understanding of disposal practices for these devices were not consistent.

Open Recommendations

Actions Pending

- 1. Provide users guidance for implementing security controls on standalone PCs and laptops.
- 2. Develop and require users to sign a rules-ofbehavior agreement accepting responsibility for implementing security controls on standalone PCs and laptops.
- 3. Develop and implement procedures for verifying all required security controls are implemented on standalone PCs and laptops.

By 2010, guidance for implementing security controls on standalone PCs and laptops will be developed and posted on the computer security Web page, and offices will be notified that the guidance is available.

Standard rules of behavior implementing security controls on standalone PCs and laptops will be developed, the standard agreement will be posted on the computer security Web page, and offices will be notified of the requirement for all users of such devises to sign the agreement as a condition of using the devices. Development of the rules of behavior, including review by the National Treasury Employees Union, is expected to be completed by the end of FY 2008.

By 2010, procedures for verifying all required security controls are implemented on standalone PCs and laptops will be developed and implemented.

continued

SYSTEM EVALUATION OF SECURITY CONTROLS FOR STANDALONE PERSONAL COMPUTERS AND LAPTOPS (OIG-05-A-18), CONTINUED

Open Recommendations

4. Provide users guidance on compliance with Executive Order (EO) 13103, Computer

Software Piracy, for standalone PCs and

laptops.

Develop and require users to sign a rulesof-behavior agreement acknowledging their compliance with EO 13103, Computer Software Piracy, for standalone PCs and laptops.

- Develop and implement procedures for monitoring compliance with EO 13103, Computer Software Piracy, for standalone PCs and laptops.
- 7. Develop detailed procedures in the appropriate NRC management directives (MDs) for the disposal of equipment used to process safeguards and/or classified information. These procedures should then be referenced in the appropriate chapters of the Volume 12 series of management directives.
- 8. Include the procedures for the disposal of equipment containing safeguards and/or classified information in the security plan templates.

Actions Pending

Clear guidance on compliance with EO 13103, for standalone PCs and laptops will be developed and disseminated as part of the standard rules of behavior as discussed above under Recommendation 2. Development of the rules of behavior, including review by the National Treasury Employees Union, is expected to be completed by the end of FY 2008.

As part of the development of the standard rules of behavior as discussed above under Recommendations 2 and 4, a standard rules-of-behavior agreement for users to acknowledge their compliance with EO 13103 for standalone PCs and laptops will be developed and offices will be notified of the requirement for all users of such devices to sign the agreement as a condition of using the devices. Development of the rules of behavior, including review by the National Treasury Employees Union, is expected to be completed by the end of FY 2008.

Procedures for monitoring compliance with EO 13103 for standalone PCs and laptops will be developed and issued as part of the as part of the standard rules of behavior as discussed above under Recommendation 2. Development of the rules of behavior, including review by the National Treasury Employees Union, is expected to be completed by the end of FY 2008.

NRC's process for disposing of media/equipment used to process safeguards and/or classified information at Headquarters and regional offices was documented in January 2007. MD 12.1, NRC Facility Security Program, and MD 12.2, NRC Classified Information Security Program, were revised to include language consistent with guidance currently provided in MD 12.5, NRC Automated Information Security Program, and reissued on August 2, 2007. The appropriate language has also been incorporated into draft new MD 12.7, NRC Safeguards Information Security Program, which is currently in final agency concurrence and is expected to be issued by December 2007.

The standard security plans for systems that process safeguards information or classified information have been modified to contain procedures for the disposal of equipment containing such information. Closure of this recommendations requires OIG's verification that the modified security plan templates include the citations to reference the appropriate disposal procedures, which is expected in early FY 2008.

NRC'S GENERIC COMMUNICATIONS PROGRAM (OIG-05-A-19) OCTOBER 7, 2005

This audit was conducted to assess the effectiveness of the Generic Communications Program, specifically whether NRC generic communications are issued in accordance with the Generic Communications Program and other regulatory requirements, and how NRC tracks licensee actions on generic communications. The audit found that NRC has an established framework for developing and issuing certain generic communications, but that weaknesses exist in NRC's internal controls over generic communications in controls for oversight of licensee actions.

Open Recommendations

Include safeguards advisories, as well as any other agency communication tool that meets the definition of a generic communication, in the formal Generic Communications Program to ensure compliance with regulatory requirements.

3. Implement controls to ensure a systematic, consistent tracking methodology from initiation to closure for each agency-issued generic communication.

4. Direct the development of a methodology that will allow the staff to gauge the effectiveness of agency-issued generic communications.

Actions Pending

Proposed new "Management Directive (MD) "8.18," NRC Generic Communications Program," defines the scope of NRC's generic communications and defines organizational roles and responsibilities for each generic communications product, and establishes security advisories and Information Assessment Team advisories as additional agency generic communications products. The revised MD is in final concurrence and is expected to be issued in FY 2008.

In June 2006, NRC established an interoffice working group to evaluate the current process for initiating, developing, tracking, and distributing generic communications and recommend how the process should be changed. The working group decided to incorporate the database into the project plan for a system to track and store requests for additional information (licensee responses and inquiries) which includes capabilities for collaborative discussion threads and for tracking NRC reviewers' queries to the industry and the responses. The initiation phase of the project began in June 2007, and the staff expects to have a prototype database before the end of 2007.

Proposed new MD 8.18, "NRC Generic Communications Program," defines the scope of NRC's generic communications and defines organizational roles and responsibilities for each generic communications product, including the conduct of effectiveness reviews. In addition, it clearly identifies those generic communications that require effectiveness reviews. The revised MD is in final concurrence and is expected to be issued in FY 2008.

INDEPENDENT EVALUATION OF NRC'S IMPLEMENTATION OF THE FEDERAL INFORMATION SECURITY MANAGEMENT ACT FOR FY 2005 (OIG-05-A-21) OCTOBER 7, 2005

This was an independent evaluation of NRC's implementation of the Federal Information Security Management Act for FY 2005. The review found that while NRC had made improvements to its automated information security program, there were major deficiencies that needed to be addressed.

Open Recommendations

Actions Pending

- Categorize all NRC information systems, including systems operated by a contractor or other organization on behalf of the agency, in accordance with Federal Information Processing Standard (FIPS) 199.
- Over half of the NRC's Major Applications, General Support Systems, or contractor systems have an approved security categorization. The remaining systems are either in process. The categorization of the remaining systems in accordance with FIPS 199 is expected to be completed by December 31, 2007. OIG is combining this recommendation with Recommendation 2 of OIG-07-A-19, the Independent Evaluation of NRC's Implementation of FISMA for FY 2007, which will be tracked in the FISMA plan of action and milestones (POA&M) until closed.
- 3. Develop and implement procedures to ensure contingency plans are tested annually, regardless of the status of the systems' certification and accreditation.
- In September 2007, NRC informed OIG that a procedure addressing this requirement was issued on July 1, 2007. Closure of this recommendation requires OIG review of the procedure, which is expected in early FY 2008. OIG is combining this recommendation with Recommendation 6 of OIG-07-A-19, the Independent Evaluation of NRC's Implementation of FISMA for FY 2007, which will be tracked in the FISMA POA&M until closed.
- 4. Maintain current copies of certification and accreditation (C&A) memoranda for systems provided by other Federal agencies.
- NRC has C&A documentation for four of the eight systems provided to NRC by other Federal agencies. The C&A memoranda for the four outstanding systems have not yet been submitted by the responsible system owners, although they are not required to be submitted until an Authority to Operate is requested, which is expected to be completed by December 31, 2007. OIG is combining this recommendation with Recommendation 7 of OIG-07-A-19, the Independent Evaluation of NRC's Implementation of FISMA for FY 2007, which will be tracked in the FISMA POA&M until closed.

continued

INDEPENDENT EVALUATION OF NRC'S IMPLEMENTATION OF THE FEDERAL INFORMATION SECURITY MANAGEMENT ACT FOR FY 2005 (OIG-05-A-21), CONTINUED

Open Recommendations

Actions Pending

5. Maintain current copies of self-assessments for systems provided by other Federal agencies.

To satisfy this recommendation, NRC is to obtain a letter from the senior IT security officer at other Federal agencies who provide systems to NRC stating that the annual self-assessment for the system in question has been completed. This requirement will be communicated by the Senior Information Technology Security Officer (SITSO) to NRC offices on an annual basis to remind responsible offices to update the self-assessment status for their systems. The Office of Information Services (OIS) will keep track of the status of self-assessment for all systems. The self-assessment documentation (memorandum or e-mail) will be reflected as an artifact requirement for "Other Government agency" systems. These actions are expected to be completed by December 31, 2007. OIG is combining this recommendation with Recommendation 7 of OIG-07-A-19, the Independent Evaluation of NRC's Implementation of FISMA for FY 2007, which will be tracked in the FISMA POA&M until closed.

 Maintain current copies of annual contingency plan testing results for systems provided by other Federal agencies. To satisfy this recommendation, NRC is to obtain a letter from the senior IT security officer at other Federal agencies who provide systems to NRC stating that the annual contingency plan testing for the system in question has been completed. This requirement will be communicated by the SITSO to NRC offices on an annual basis to remind responsible offices to update the annual contingency plan testing status for their systems. OIS will keep track of the status of annual contingency plan testing for all systems. This annual contingency plan testing documentation (memorandum or e-mail) will be reflected as an artifact requirement for "Other Government agency" systems. These actions are expected to be completed by December 31, 2007. OIG is combining this recommendation with Recommendation 7 of OIG-07-A-19, the Independent Evaluation of NRC's Implementation of FISMA for FY 2007, which will be tracked in the FISMA POA&M until closed.

 Develop and implement procedures for performing oversight of major applications and general support systems operated by a contractor or other organization on behalf of the agency. In July 2007, NRC informed OIG that a procedure addressing this requirement was issued on March 1, 2007. Closure of this recommendation requires OIG review of the procedure, which is expected in early FY 2008. OIG is combining this recommendation with Recommendation 8 of OIG-07-A-19, the Independent Evaluation of NRC's Implementation of FISMA for FY 2007, which will be tracked in the FISMA POA&M until closed.

continued

INDEPENDENT EVALUATION OF NRC'S IMPLEMENTATION OF THE FEDERAL INFORMATION SECURITY MANAGEMENT ACT FOR FY 2005 (OIG-05-A-21), CONTINUED

Open Recommendations

Actions Pending

8. Review and update the six completed eauthentication risk assessments to correct inaccuracies and inconsistencies with FIPS 199 security categorizations. Of the six completed e-authentication risk assessments (ERAs), three were previously verified as having been updated to correct inaccuracies and inconsistencies with FIPS 199 security categorizations. Of the remaining three, one was completed by the system owner to include e-authentication information and was submitted to the SITSO for review in June 2007. Another system is being redesigned into four subsystems, and the new security categorization with the updated design is being developed by the system owner, so the current e-authentication documentation will be replaced with the new one. The last system's security categorization is being revised to incorporate the SITSO's comments. The remaining ERAs are expected to be completed by December 2007. OIG is combining this recommendation with Recommendation 15 of OIG-07-A-19, the Independent Evaluation of NRC's Implementation of FISMA for FY 2007, which will be tracked in the FISMA POA&M until closed.

9. Develop and implement a plan for completing the remaining e-authentication risk assessments.

Currently, 20 active Major Applications have completed ERAs. Two Major Applications do not have an ERA and a third system's security categorizations use a new template that incorporates the ERA. All remaining ERAs are expected to be completed by December 31, 2007. OIG is combining this recommendation with Recommendation 15 of OIG-07-A-19, the Independent Evaluation of NRC's Implementation of FISMA for FY 2007, which will be tracked in the FISMA POA&M until closed.

10. Develop and implement procedures for ensuring employees and contractors with significant IT security responsibilities are identified, receive security awareness and training, and the individual and associated training are readily identifiable.

NRC is in the process of selecting a security Line of Business agency to provide training. It is expected that the training will begin by October 31, 2008. OIG is combining this recommendation with Recommendation 14 of OIG-07-A-19, the Independent Evaluation of NRC's Implementation of FISMA for FY 2007, which will be tracked in the FISMA POA&M until closed.

AUDIT OF NRC'S INTEGRATED PERSONNEL SECURITY SYSTEM (OIG-06-A-06) JANUARY 9, 2006

This audit was conducted to determine if the Integrated Personnel Security System (IPSS) meets its required operational capabilities. It found that while many users report that the system is easier to use than its predecessor systems and provides more functionality, the IPSS does not perform in accordance with required operational capabilities.

Open Recommendations

Actions Pending

- 4. Review and correct the most recent reinvestigation dates within the IPSS.
- 7. Perform top-to-bottom cleanup effort of every active file; support this effort with clear written guidance as to what data goes in what field.
- 17. Conduct a cost-benefit analysis to determine whether the agency should continue to develop the IPSS versus replacing the system. As part of the cost-benefit analysis, consider current Federal personnel security requirements.

A top-to-bottom cleanup effort of every active file to ensure the most recent reinvestigation dates are in the IPSS is under way, with completion expected by November 30, 2007.

Updated IPSS data entry guidance was issued in February 2007 and that guidance is being used to perform the top-to-bottom cleanup effort of every active file that is under way, and is expected to be completed by November 30, 2007.

A contract was awarded in September 2007 to obtain support for Homeland Security Presidential Directive 12 planning and implementation. NRC included in this contract a task to conduct a cost-benefit analysis that will compare the option of continuing to modify IPSS with the option of replacing the entire system. The results of the this cost-benefit analysis are expected to be available by December 31, 2007.

AUDIT OF NRC'S OFFICE OF NUCLEAR SECURITY AND INCIDENT RESPONSE (OIG-06-A-09) FEBRUARY 17, 2006

This audit was an independent evaluation of the operations of the Office of Nuclear Security and Incident Response (NSIR), formed in April 2002, specifically, focusing on NSIR's management of emergent work, communications with stakeholders, and implementation of the recommendations from the organizational assessment performed in 2003. The audit found that while NSIR accomplished a great deal since its inception, it needed to focus on refining and formalizing its day-to-day operations to improve its ability to meet its mission.

Open Recommendations

Actions Pending

1. Establish a means of assessing the current workload and prioritizing assignments, including but not limited to emergent work, as they are received, so they can be incorporated into the workload without overextending NSIR's resources.

NSIR implemented a reorganization in 2006 that established an improved span of control and management of the office's workload and developed improved procedures and processes for tracking controlled correspondence. NSIR continually monitors its performance and effectiveness through its operating plan and the performance plans of its managers and staff, and also uses the Performance Budgeting and Performance Management Process to manage planned and unplanned work. NSIR's Work Planning and Management Initiative Group (WPMIG) will complete a revision to office procedure COM-201, "Controlled Correspondence" and a comprehensive business process framework to identify relevant existing office procedures and processes and determine if any new procedures need to be developed. The revised and any new procedures identified are expected to be issued by December 2007.

continued

AUDIT OF NRC'S OFFICE OF NUCLEAR SECURITY AND INCIDENT RESPONSE (OIG-06-A-09), CONTINUED

Open Recommendation	Action Pending
2. Review the Emergent Work Process to ensure emergent work is accurately documented to assist with workforce and budget decisions.	NSIR has focused its efforts on integrating the new Electronic Document and Action Tracking System (EDATS) into its overall work planning management system, and expects to fully implement this integrated solution after it is accredited and certified by December 2007.
5. Establish and implement a method to measure the level of effective communications.	NSIR is evaluating the utility of the Division of Preparedness and Response's metrics, developed to measure the level of effective communications, to determine whether they should be expanded to the rest of the organization. This effort is expected to be completed in early FY 2008.
6. Assess the recommendations from the 2003 office assessment to determine their applicability and implement those that would benefit NSIR today.	There were two groups of initiatives to address the recommendations from the 2003 office assessment. The Roles and Responsibilities Initiative resulted in completion of and issuance of new Elements and Standards for branch chiefs for the FY 2007 performance appraisal cycle. The roles and responsibilities team also determined that the automated NSIR Functional Directory (available on the NSIR intranet) provides the necessary information to office employees concerning their roles and responsibilities. While not originally part of the roles and responsibilities team's mandate, the team also reviewed the job responsibilities of Technical Assistants and Management Analysts within NSIR to determine how best to align these positions and associated responsibilities in the organization. This review included comparison of current duties versus position descriptions (PDs) and comparisons across divisions and with other offices. The recommendations from this review were discussed at an NSIR management retreat mid-June 2007, and as a result, NSIR standardized the PDs of the technical assistants and management assistants across the office. NSIR has also made significant progress in providing its employees with copies of their official PDs. About 65 percent of NSIR's PDs have been classified and copies provided to the employee and manager. All PDs are expected to be classified by December 2007.
	As part of the Staffing and Budget Development Initiative, NSIR deployed a staffing plan and vacancy report in March 2007 and issued a training procedure in May 2007.
	Recommendations remaining from the 2003 office assessment relate to IT infrastructure needs. Assessment of these has been delayed until the consolidation of the NSIR staff on two adjacent floors, which is expected to be completed by the end of 2007. It is expected that actions to address those recommendations will be completed in early FY 2008.

AUDIT OF THE DEVELOPMENT OF THE NATIONAL SOURCE TRACKING SYSTEM (OIG-06-A-10) FEBRUARY 24, 2006

This audit was conducted to determine whether NRC's oversight of byproduct and sealed source materials provides reasonable assurance that licensees are using the materials safely and account for and control the materials. It concluded that the NSTS may be inadequate because the supporting regulatory analysis is based on unreliable data and did not consider other viable options.

Open Recommendation

1. Before the National Source Tracking System (NSTS) rulemaking is finalized, conduct a comprehensive regulatory analysis for the NSTS that explores other viable options, such as those in the International Atomic Energy agency's (IAEA's) Code of Conduct. The regulatory analysis should include an assessment of expanding materials tracked in NSTS to contain categories 2, 3, 4, and 5; aggregation of sources; and bulk material.

Action Pending

The Commission has directed the NRC staff to prepare a proposed rule to include IAEA Category 3 data in the NSTS. As part of the proposed rulemaking, the staff is developing a technical basis and a regulatory impact analysis to provide the rationale for considering inclusion of licensees with Category 3 and 3.5 sources in the NSTS. In preparing the technical basis and regulatory analysis, the staff will use, as partial input, results and information on the numbers of licensees and sources obtained from a one-time data collection and analysis of Category 3.5 sources, which is under way. A Rulemaking Working Group, consisting of NRC Headquarters technical and legal staff, regional staff, and Agreement State representatives, has been formed to consider technical information and issues associated with including IAEA Category 3 sources in the NSTS. The proposed rule package is scheduled to be submitted to the Commission for review and approval in March 2008. The proposed rule package will include the *Federal Register* notice containing the proposed rule and the draft regulatory impact analysis, and will be issued for public comment upon the Commission's approval.

AUDIT OF THE BYPRODUCT MATERIALS LICENSE APPLICATION & REVIEW PROCESS (OIG-06-A-11) MARCH 14, 2006

As part of a larger effort to determine whether NRC's oversight of byproduct material provides reasonable assurance that licensees account for and control the materials, this audit was specifically directed towards determining if NRC ensures, through its license application and review process, that only legitimate entities receive NRC byproduct material licenses. It concluded that because NRC has as not conducted vulnerability assessments of all aspects of the materials program, there may be vulnerabilities in the license application and review process that could be exploited by individuals with malevolent intent.

Open Recommendations

1. Conduct a complete vulnerability assessment of the materials program, including the license application and review process and the methods used by licensees to purchase byproduct material from sellers.

Actions Pending

In September 2007, the Commission approved a comprehensive plan to address needed changes in NRC's process for issuing licenses for radioactive sources. The plan calls for an independent, external review to identify potential weaknesses or security gaps in the NRC materials licensing process, and is expected to be completed by March 2008. Additionally, the plan establishes a Materials Program Working Group that will submit a comprehensive report to September 30, 2008, providing recommendations to address any identified security gaps or weaknesses.

continued

AUDIT OF THE BYPRODUCT MATERIALS LICENSE APPLICATION & REVIEW PROCESS (OIG-06-A-11) CONTINUED

Open Recommendations

Actions Pending

Modify the license application and review process to mitigate the risks identified in the vulnerability assessment. An initial schedule for completion of recommendations resulting from the independent, external review panel's assessment is expected to be available in early 2008. The independent, external review panel's report will be provided to the Materials Program Working Group for further assessment of the panel's recommendations (i.e., establishing time lines for execution of the recommendations). Depending on the depth and scope of the working group's final assessment, changes to the licensing process could take several years; however, both the panel and the working group are also exploring short-term, interim options that would address any identified vulnerabilities in the shortest amount of time.

AUDIT OF NRC'S IMPLEMENTATION OF HOMELAND SECURITY PRESIDENTIAL DIRECTIVE-12 (OIG-06-A-20) AUGUST 1, 2006

This audit was conducted to determine whether to determine whether NRC is positioned to meet the requirements of HSPD-12. It found that NRC has implemented a personal identity verification process in accordance with the Office of Management and Budget's deadline and is considering personal identify verification systems that will provide technical interoperability among Government departments and agencies, improvements are needed.

Open Recommendation

Action Pending

Formalize the Homeland Security
 Presidential Directive 12 (HSPD12) Working Group by developing
 a charter that defines the
 membership and expectations.

In September 2007, NRC finalized the HSPD-12 Working Group charter, which defines working group membership and expectations. Closure of this recommendation requires OIG's review of the final charter, which is expected in early FY 2008.

NRC'S BASELINE SECURITY AND SAFEGUARDS INSPECTION PROGRAM (OIG-06-A-21) SEPTEMBER 8, 2006

The audit of NRC's Drug Testing Program (discussed further in the table on OIG-05-A-05) found that the NRC's Drug-Free Workplace Plan was not in compliance with Federal guidance that requires the plan to receive U.S. Department of Health and Human Services' (HHS's) approval and that it was missing a required clause.

Open Recommendations

Actions Pending

1. Provide the required initial and refresher security training courses for regional security inspectors at the frequency needed to support qualification requirements.

Phase 1 of NRC's corrective actions is to develop foundation security courses, "Security Fundamentals" and "Reactor Technology for Security." The Security Fundamentals course is under review with expected delivery in FY 2008. A pilot for the Reactor Technology for Security course was completed in June 2007 and is under review based on comments received from course participants and lessons learned, with expected delivery in FY 2008. A 3-day Annual Security Refresher Course for security inspectors from all four NRC regions was conducted in November 2006, and is scheduled for November 13-15, 2007. This course is now listed in the NRC course catalog. Phase 2 of NRC's corrective actions is to develop four modules of advanced security field courses. These are being reviewed and NRC is pursuing contracts with outside Federal agencies to provide portions of this specialized training. Phase 2 courses are expected to be available by FY 2009.

4. Update the security inspector training program to ensure course material is current and relevant.

Revisions of the training requirements in NRC Manual Chapter (MC) 1245, Appendix C4, "Safeguards Inspector Technical Proficiency Training and Qualification Journal" and Office of Nuclear Security and Incident Response Office Procedure ADM-109, "Training Development and Qualification Programs" are under development and are expected to be issued in FY 2008 and FY 2009, respectively. As the courses in response to Recommendation 1 are finalized and published in the NRC Training Catalog, MC 1245 and ADM-109 will also be updated.

6. Include guidance in the baseline security and safeguards inspection procedures to ensure inspectors review an adequate number of sample items to assess the effectiveness of the licensee's security program.

The baseline inspection procedures and guidance are currently being reviewed to assess their guidance on sampling. Changes to the baseline inspection procedures to refine the sampling process are expected to be finalized by the end of FY 2008.

7. Implement training on how to select an adequate number of sample items.

The Security Fundamentals course (Module 4, "Security Plans and Requirements"), expected to be delivered in FY 2008, will include a standardized methodology for determining sample sizes. Instruction on the methodology will be included in the Annual Security Refresher course (currently scheduled for November 13-15, 2007) after revisions are made to the baseline inspection procedures.

continued

NRC'S BASELINE SECURITY AND SAFEGUARDS INSPECTION PROGRAM (OIG-06-A-21), CONTINUED

Open Recommendations	Actions Pending
8. Maintain and share the Office of Nuclear Security and Incident Response database of security findings with the regions.	In August 2006, an updated version of the Security Findings Review Panel (SFRP) database was created. Since its completion, all data from the 4th quarter of calendar year (CY) 2005 to the present has been entered into the database. Based on a review of the database, several upgrades and improvements were recommended and are nearing completion. Data entry of SFRP worksheets prior to the 4th quarter of CY 2005 is complete.
	On September 28, 2007, the SFRP database, which provides historic information on security findings, was sent to the NRC Regions. Updates to the database and reports will be disseminated to the regions on a periodic basis. NRC considers action in response to this recommendation to be complete, although closure requires OIG's review of documentation showing that the database is updated and is being sent to the NRC Regions for review, and is expected in early FY 2008.

AUDIT OF NRC'S PROCESS FOR RELEASING COMMISSION DECISION DOCUMENTS (OIG-06-A-22) SEPTEMBER 8, 2006

The purpose of this audit was to assess the NRC's process for evaluating SECY Papers and staff requirements memoranda for public release pursuant to relevant legal and regulatory requirements. It concluded that while NRC has a process for handling Freedom of Information Act (FOIA) requests, there are weaknesses in the internal controls needed to ensure full compliance with the FOIA.

Open Recommendations	Actions Pending
Develop a program for NRC compliance with the FOIA's automatic disclosure requirements.	Commission procedures have been modified, however, closure of this recommendation requires the revision of Management Directive (MD) 3.4, "Release of Information to the Public," to address how documents will be screened for compliance with 5 U.S.C. 552 (a)(1) and (a)(2). Revised MD 3.4 is expected to be issued by January 2008.
2. Conduct a documented FOIA 552(a)(1) and (a)(2) review of previously unpublished SECY Papers and staff requirements memoranda.	The NRC has disagreed with this recommendation and provided a justification to the OIG in March 2007. The recommendation remains in an unresolved status pending the OIG's additional analysis and consideration of the NRC's justification.

EVALUATION OF NRC'S USE OF PROBABILISTIC RISK ASSESSMENT IN REGULATING THE COMMERCIAL NUCLEAR POWER INDUSTRY (OIG-06-A-24) SEPTEMBER 29, 2006

The objectives of this evaluation were to determine if NRC is following prevailing good practices in probabilistic risk assessment (PRA) methods and data in its use of PRA, using prevailing good practices in PRA methods and data appropriately in its regulation of nuclear power plant licensees, and achieving the objectives of the PRA policy statement. It concluded that although NRC is employing prevailing good practices in regulation of nuclear power plants, NRC lacks formal, documented processes and associated configuration control for PRA computer models and software.

Open Recommendations

Actions Pending

- 1. Develop and implement a formal, written process for maintaining PRA models that are sufficiently representative of the as-built, as-operated plant to support model uses.
- The NRC's revised Risk Assessment of Operational Events Handbook, was completed in September 2007, now provides a formal, written process for maintaining PRA models to ensure that the Standardized Plant Analysis Risk (SPAR) models used in the risk analysis of operational events represent the as-built, as-operated plant to the extent needed to support the analyses. The revised handbook is expected to be available for implementation in early FY 2008.
- 3. Conduct a full verification and validation (V&V) of the Systems Analysis Program for Hands-On Integrated Reliability Evaluations (SAPHIRE) Version 7.2 and Graphical Evaluation Module (GEM). (SAPHIRE and GEM are software programs used to perform evaluations of SPAR models and provide risk results based on the events or initiators being evaluated.)
- Because development of SAPHIRE Version 8 is under way, a full V&V of SAPHIRE Version 7 would not be an effective use of resources. Therefore, closure of this recommendation requires the general release of SAPHIRE Version 8, which is expected to occur in July 2009.

INDEPENDENT EVALUATION OF NRC'S IMPLEMENTATION OF THE FEDERAL INFORMATION SECURITY MANAGEMENT ACT FOR FY 2006 (OIG-06-A-26) SEPTEMBER 29, 2006

This was an independent evaluation of NRC's implementation of the Federal Information Security Management Act for FY 2006. The review found that NRC's information security program has various information security program deficiencies and weaknesses.

Open Recommendation

Action Pending

Re-categorize the Network
 Continuity of Operations (COOP)
 listed system as a general support system.

NRC has incorporated the components of the COOP system into existing Infrastructure General Support Systems, and updated the security categorization documents for the Local Area Network/Wide Area Network (LAN/WAN), e-mail, Remote Access System (RAS), and Novell Infrastructure systems to incorporate the appropriate COOP components. The updates to the security categorization documents have been completed and approved for the LAN/WAN and e-mail systems, and the updates to the security categorization documents for the RAS and Novell Infrastructure systems were completed and forwarded to the Senior Information Technology Security Officer (SITSO) for approval. Final approval of the security categorization documents for the RAS and Novell Infrastructure systems is expected to be given by December 15, 2007. OIG is combining this recommendation with Recommendation 9 of OIG-07-A-19, the Independent Evaluation of NRC's Implementation of FISMA for FY 2007, which will be tracked in the FISMA plan of action and milestones (POA&M) until closed.

SUMMARY OF FINANCIAL STATEMENT AUDIT AND MANAGEMENT ASSURANCES

SUMMARY OF FINANCIAL STATEMENT AUDIT

Audit Opinion — Unqualified	Audit O	pinion —	Unqua	alified
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Restatement — No

Material Weaknesses	Beginning Balance	New	Resolved	Consolidated	Ending Balance
Information System-wide Security Controls	1	-	-	-	1
Fee Billing System	1	-	(1)	-	-
Total Material Weaknesses	2	-	(1)	-	1

SUMMARY OF MANAGEMENT ASSURANCES

Effectiveness of Internal Control over Financial Reporting (FMFIA § 2)

Statement of Assurance — Unqualified

There are no material weaknesses for Internal Control over Financial Reporting.

Effectiveness of Internal Control over Operations (FMFIA § 2)

Statement of Assurance — Qualified

Material Weaknesses	Begin- ning Balance	New	Resolved	Consoli- dated	Reas- sessed	Ending Balance
Information System-wide Security Controls	1	-	-	-	-	1
Information System-wide Security Controls	1	-	-	(1)	-	-
Total Material Weaknesses	2	-	-	(1)	-	1

Conformance with Financial Management System Requirements (FMFIA § 4)

Statement of Assurance — Systems conform to financial management system requirements

Non-Conformances	Begin- ning Balance	New	Resolved	Consoli- dated	Reas- sessed	Ending Balance
Fee Billing System	1	-	(1)	-	-	-
Total Non-Conformances	1	-	(1)	-	-	-

Compliance with Federal Financial Management Improvement Act (FFMIA)

	Agency	Auditor
Overall Substantial Compliance	No	No
1. Systems Requirements	No	No
2. Accounting Standards	Yes	Yes
3. USSGL at Transaction Level	Yes	Yes

VERIFICATION AND VALIDATION OF NRC'S MEASURES AND METRICS

Below is the agency's verification and validation of the measures and metrics associated with the agency's strategic goals of Safety and Security.

NRC Data Collection Procedures

Most of the data used to measure the NRC's performance against its strategic goals related to safety are obtained or derived from the NRC's abnormal occurrence (AO) data and reports submitted by licensees. The AO criteria have been amended to ensure that they are consistent with the NRC's rulemaking on Title 10, Part 35, "Medical Use of Byproduct Material," of the *Code of Federal Regulations* (10 CFR Part 35).

The NRC developed its AO criteria to comply with the legislative intent of section 208 of the Energy Reorganization Act of 1974, as amended. This act requires the NRC to inform the Congress of unscheduled incidents or events that the Commission determines to be significant from the standpoint of public health and safety. The agency includes events that meet the AO criteria in its annual "Report to Congress on Abnormal Occurrences" (NUREG-0090). In addition, in 1997, the Commission determined that events occurring at Agreement Statelicensed facilities that meet the AO criteria should be reported in the annual AO report to Congress. Therefore, the AO criteria developed by the NRC are uniformly applied to events that occur at facilities, licensed or otherwise, that are regulated by the NRC and the Agreement States.

Data for AOs originate from external sources, such as Agreement States and NRC licensees. The NRC believes that these data are credible because (1) NRC regulations require the reporting of the information needed from external sources; (2) the NRC maintains an aggressive inspection program that, among other activities, audits licensees and evaluates Agreement State programs to determine whether information is

being reported as required by the regulations; and (3) agency procedures address reviewing and evaluating licensees. The NRC database systems that support this process include the Licensee Event Report Search (LERSearch) system, the Accident Sequence Precursor (ASP) database, the Nuclear Materials Events Database (NMED), and the Radiation Exposure Information Report system.

The NRC has established procedures for the systematic review and evaluation of events reported by NRC licensees and Agreement State licensees. The objective of the review is to identify events that are significant from the standpoint of public health and safety based on criteria that include specific thresholds. The NRC uses a number of sources to determine the reliability and technical accuracy of event information reported to the agency. Such sources include (1) the NRC licensee reports, which are carefully analyzed, (2) NRC inspection reports, (3) Agreement State reports, (4) periodic reviews of Agreement State regulatory programs, (5) NRC consultant/contractor reports, and (6) U.S. Department of Energy operating experience weekly summaries. In addition, daily interactions and exchanges of event information occur between headquarters and the regional offices, and staff participate in periodic conference calls among headquarters, the regions, and Agreement States to discuss event information. All applicable NRC Headquarters program offices, regional offices, and agency management personnel validate and verify identified events that meet the AO criteria before their submission to Congress.

The Agency Action Review meeting provides another opportunity for NRC's senior management to discuss significant events, licensee performance issues, trends, and actions that the NRC needs to take to mitigate recurrences.

The agency's computer security program maintains data protection and provides administrative,

technical, and physical security measures to guard the agency's information, automated information systems, and information technology infrastructure. These measures include special safeguards to protect classified information, unclassified safeguards information, and sensitive unclassified information that are processed, stored, or produced on designated automated information systems.

GOAL 1 - SAFETY

Ensure protection of public health and safety and the environment.

Nuclear Reactor Safety

Strategic Outcomes:

- No nuclear reactor accidents.
- No inadvertent criticality events.
- No acute radiation exposures resulting in fatalities.
- No releases of radioactive materials that result in significant radiation exposures.
- No releases of radioactive materials that cause significant adverse environmental impacts.

Verification:

Licensees report any nuclear reactor events at their facilities in licensee event reports (LERs). The NRC reviews the LER data, and the agency's AO coordinators then discuss each potential AO during their periodic meetings at headquarters and the regional offices to determine whether it meets the AO reporting criteria. The staff use the LERs to identify any nuclear reactor accidents, deaths from acute radiation exposures, events that result in significant radiation exposure, or releases of radioactive materials that cause significant adverse environmental impacts that meet the criterion for an AO. In addition, NRC specialists periodically conduct inspections to assess licensee compliance with reporting criteria as well as

radiological and environmental release criteria. If a licensee reports an event involving core damage, NRC inspectors carefully investigate the event to ensure the validity of the information in the licensee's report. In addition, a resident inspector on duty at each reactor monitors the facility in real time. The resident inspector verifies the safe operation of the facility and would be aware of any instances in which core damage has occurred or radiation was released from the reactor in excess of reporting limits.

The NRC staff prepares AO write-ups and evaluates events, using specific criteria to select those events that the staff recommends to the Commission to be considered as AOs. The NRC's Office of Nuclear Regulatory Research makes the final determination about which events to recommend for consideration as potential AOs. NRC Management Directive 8.1, "Abnormal Occurrence Reporting Procedure," provides thorough documentation of the AO reporting process.

Validation: Validation addresses the issues below.

No nuclear reactor accidents. The NRC Severe Accident Policy Statement defines nuclear reactor accidents as those events that result in substantial damage to the reactor fuel, regardless of whether offsite consequences occur.

No inadvertent criticality events. Events collected under this performance measure are actual occurrences of accidental criticality. Such events could compromise public health and safety, the environment, and the common defense and security. Events of this magnitude are not expected and would be rare. If such an event occurs, it would result in a prompt and thorough investigation, including consequences, root causes, and necessary actions by the licensee and the NRC to mitigate the consequences and prevent recurrence.

No acute radiation exposures resulting in fatalities. Determining whether any deaths result from acute radiation exposure is fundamentally essential to protecting public health and safety. Events of this magnitude are rare. If such an unlikely event

occurs, it would result in a prompt and thorough investigation of the event, its consequences, its root causes, and necessary actions by the licensee and/or the NRC to mitigate the consequences and prevent recurrence. This strategic outcome measure is a direct measurement of the occurrence of radiation-related deaths at nuclear reactors.

No releases of radioactive materials that result in significant radiation exposures. Nuclear power generation produces radiation, which can be harmful if not properly controlled. Measuring the number of events resulting in significant radiation exposures, as well as any deaths from radiation exposure, indicates whether radiation-related deaths and illness are being prevented. Significant radiation exposures are defined as those that result in unintended permanent functional damage to an organ or a physiological system, as determined by a physician in accordance with AO Criterion I.A.3.

No releases of radioactive materials that cause significant adverse environmental impacts. The radiation produced in the process of generating power from nuclear materials can also potentially harm the environment if it is not properly controlled. Releases that have the potential to adversely impact the environment are currently undefined. As a surrogate for this performance measure, the NRC collects data on the frequency of radiation releases into the environment that exceed specified limits. AO Criterion I.B.1 in Appendix A to NUREG-0090 defines such releases as those involving "the release of radioactive material to an unrestricted area in concentrations which, if averaged over a period of 24 hours, exceed 5,000 times the values specified in Table 2 of Appendix B to 10 CFR Part 20, unless the licensee has demonstrated compliance with 20.1301 using 20.1302(b)(1) or 20.1302 (b)(2)(ii)." The essence of the criterion is that events that result in unintended permanent functional damage to an organ or a

physiological system as determined by a physician are used as the measure for events that result in releases of radioactive material causing an adverse impact on the environment. Such events are reported in LERs, which are sent to the NRC as documentation of reportable occurrences. This strategic outcome measure is a direct measurement of instances in which harmful impacts on the environment occur because of nuclear reactors.

Performance Measures:

- number of significant safety events and conditions per year at reactor facilities
- number of new conditions evaluated as red by the NRC's Reactor Oversight Process, with a reactor safety target of less than or equal to 3¹

Verification:

The data for this performance measure is collected in two ways as part of the NRC's reactor oversight process (ROP). Inspection findings are collected at least quarterly by NRC inspectors. Inspectors use formal detailed inspection procedures to review plant operations and maintenance. Inspection findings are reviewed by NRC managers to assess their significance as part of the ROP's significance determination process. The data for performance indicators is collected by licensees and submitted to the NRC at least quarterly. The significance of the data is determined by thresholds for each indicator. The NRC conducts inspections of licensees' processes for collecting and submitting the data to ensure completeness, accuracy, consistency, timeliness, and validity.

The NRC enhances the quality of its inspections through inspector feedback and periodic reviews of results, and inspectors are trained through a rigorous qualification program. The quality of performance indicators is improved through continuous feedback

This measure is the number of new red inspection findings during the fiscal year plus the number of new red performance indicators during the fiscal year. Programmatic issues at multi-unit sites that result in red findings for each individual unit are considered separate conditions for purposes of reporting for this measure. A red performance indicator and a red inspection finding that are due to an issue with the same underlying causes are also considered separate conditions for purposes of reporting for this measure. Red inspection findings are included in the fiscal year in which the final significance determination was made. Red performance indicators are included in the fiscal year in which Reactor Oversight Process external Web page was updated to show the red indicator.

from licensees and inspectors that is incorporate into guidance documents. The NRC publishes the inspection findings and performance indicators on the agency's Web site, and incorporates feedback received from all stakeholders as appropriate.

Validation:

The inspection findings and performance indicators used by the ROP cover a broad range of plant operations and maintenance. NRC managers review significant issues that are identified, and inspectors conduct supplemental inspections of selected aspects of plant operations as appropriate. Senior agency managers annually review plants that are identified as having performance issues, as well as a self-assessment of the ROP, and then report the results to the Commission.

This measure indicates the number of new red inspection findings during the fiscal year plus the number of new red performance indicators during the fiscal year. Programmatic issues at multiunit sites that result in red findings for each individual unit are considered as separate conditions for purposes of reporting for this measure. A red performance indicator and a red inspection finding that are attributable to an issue with the same underlying causes are also considered as separate conditions for purposes of reporting for this measure. Red inspection findings are included in the fiscal year in which the final significance determination was made. Red performance indicators are included in the fiscal year in which the ROP external Web page was updated to show the red indicator.

- number of significant safety events and conditions per year at reactor facilities
- number of significant ASPs of a nuclear accident, with a reactor safety target of 0²

Verification:

The Commission has an ASP program to systematically evaluate U.S. nuclear power plant operating experience to identify, document, and rank those operating events that were most significant in terms of the potential for inadequate core cooling and core damage (i.e., precursors). The ASP program evaluation process has five steps. First, the NRC screens operating experience data to identify events and/or conditions that may be potential precursors to a nuclear accident. The data that are evaluated include LERs from the LERSearch database, incident investigation team or augmented inspection team reviews, the NRC's daily screening of operational events, and other events identified by NRC staff as candidates. Second, the staff conducts an engineering review of these screened events using specific criteria to identify those events requiring detailed analyses as candidate precursors. Third, the NRC staff calculates a conditional core damage probability by mapping failures observed during the event to accident sequences in risk models. Fourth, the preliminary potential precursor analyses are provided to the NRC staff and the licensee for independent peer review. However, for ASP analyses of non-controversial, lowrisk precursors for which the ASP results reasonably agree with the significance determination process results, licensees may not perform formal peer reviews. The NRC staff will continue to perform an in-house review process for all analyses. Fifth, the NRC provides findings from the analyses to the licensee and the public.

It must also be noted that a time lag exists in obtaining ASP analysis results because they are often based on LERs (submitted up to 60 days after an event), and most analyses take approximately 6 months to finalize. The agency will report final data in the year in which the event occurred.

² Significant Accident Sequence Precursor (ASP) events have a conditional core damage probability (CCDP) or ΔCDP of > 1x 10⁻³. Such events have a 1/1000 (10⁻³) or greater probability of leading to a reactor accident involving core damage. An identical condition affecting more than one plant is counted as a single ASP event if a single accident initiator would have resulted in a single reactor accident. One event was identified in FY 2002 as having the potential of being a significant precursor. This precursor involved reactor pressure vessel head degradation at Davis-Besse. The detailed ASP Program preliminary analysis of this complex event was completed in September 2004. Based on the screening and engineering evaluation of FY 2002, FY 2003, and FY 2004 events, no other potentially significant precursor were identified. Therefore, the second performance measure was not exceeded for FY 2002, FY 2003, and FY 2004.

Validation:

The ASP program identifies significant precursors as those events that have a $1/1000~(10^{-3})$ or greater probability of leading to a nuclear reactor accident. Significant ASP events have a conditional core damage probability or Δ CDP of greater than or equal to $1x10^{-3}$.

 number of operating reactors whose integrated performance entered the Inspection Manual Chapter 0350 process, the multiple/repetitive degraded cornerstone column, or the unacceptable performance column of the ROP Action Matrix, with a reactor safety target of less than or equal to 4³

Verification:

The NRC's ROP collects data for this performance measure continuously, and the agency publishes the information at least quarterly. NRC inspectors use detailed formal procedures to inspect licensee performance, and NRC managers review the results to ensure the completeness, accuracy, consistency, timeliness, and validity of the data.

The NRC enhances the quality of its inspections through inspector feedback and periodic reviews of results, and inspectors are trained through a rigorous qualification program. The quality is also improved through continuous feedback from licensees and inspectors that is incorporated into guidance documents. The NRC publishes the data on the agency's Web site and incorporates feedback received from all stakeholders as appropriate.

Validation:

The information collected by the ROP covers a broad range of plant operations and maintenance. NRC managers review significant issues that are identified,

and inspectors conduct supplemental inspections of selected aspects of plant operations as appropriate. Senior managers annually review plants that are identified as having performance issues, as well as the agency's self-assessment of the ROP, and then report the results to the Commission.

This measure is the number of plants that have entered the Inspection Manual Chapter 0350 process, the multiple/repetitive degraded cornerstone column, or the unacceptable performance column during the fiscal year (i.e., were not in these columns or process the previous fiscal year). Data for this measure are obtained from the NRC external Web Action Matrix summary page, which provides a matrix of the five columns with the plants listed within their applicable columns and notes the plants in the Inspection Manual Chapter 0350 process. For reporting purposes, plants that are the subject of an approved deviation from the Action Matrix are included in the column or process in which they appear on the Web page.

 number of significant adverse trends in industry safety performance, with a reactor safety target of less than or equal to 1⁴

Verification:

The data for this performance measure are derived from data supplied by all power plant licensees in LERs, data from monthly operating reports, and performance indicator data submitted for the ROP. These data are (1) required by 10 CFR 50.73, "License Event Report System," and/or plant-specific technical specifications or (2) submitted by all plants as part of the ROP. Detailed NRC guidelines and procedures are in place to control each of these reporting processes. The NRC reviews these procedures for appropriateness both periodically and in response to licensee feedback. The NRC also conducts periodic

This measure is the number of plants that have entered the Manual Chapter 0350 process, the multiple/repetitive degraded cornerstone column, or the unacceptable performance column during the fiscal year (i.e., were not in these columns or process the previous fiscal year). Data for this measure is obtained from the NRC external web Action Matrix Summary page, that provides a matrix of the five columns with the plants listed within their applicable column and notes the plants in the Manual Chapter 0350 process. For reporting purposes, plants that are the subject of an approved deviation from the Action Matrix are included in the column or process in which they appear on the web page. The target value is set based on the expected addition of several indicators and a change in the long-term trending methodology (which will no longer be influenced by the earlier data and will be more sensitive to changes in current performance).

⁴ Considering all indicators qualified for use in reporting.

inspections of licensee processes for collecting and submitting the data to ensure completeness, accuracy, consistency, timeliness, and validity.

All licensees report the data at least quarterly. The NRC staff reviews all of the data and conducts inspections to verify safety-significant information. The NRC also employs a contractor to review the data submitted by licensees, enter the data in a database, and compile the data into various indicators. Quality assurance processes for this work have been established and included in the statement of work for the contract. Administration of the contract controls the experience and training of key personnel. The contractor identifies discrepancies and submits them to both licensees and the NRC for resolution. The NRC reviews the indicators and publishes them on the agency's Web site quarterly. The agency also incorporates feedback from licensees and the public as appropriate.

The target value is based on the expected addition of several indicators and a change in the long-term trending methodology (which will no longer be influenced by the earlier data and will be more sensitive to changes in current performance).

Validation:

The data and indicators that support reporting against this performance measure provide a broad range of information on nuclear power plant performance. The NRC staff tracks indicators and applies statistical techniques to obtain an indication of whether industry performance is improving, steady, or degrading over time. If the staff identifies any adverse trends, the NRC addresses the problem through its processes for handling generic safety issues and issuing generic communications to licensees. The NRC is developing additional risk-informed indicators to enhance the current set of indicators. In doing so, the staff considers the costs and benefits of collecting the data through ongoing, extensive interactions with industry regarding the indicators.

Senior managers annually review the Industry Trends program and report the results to the Commission.

 number of events with radiation exposures to the public and occupational workers from nuclear reactors that exceed AO Criterion I.A with a reactor safety target of 0

Verification:

Licensees report overexposures through the Sequence Coding and Search System (SCSS) LER database, maintained at the Oak Ridge National Laboratory, which receives all LERs and codes them into a searchable database. The SCSS database is used to identify those LERs that report overexposures. NRC resident inspectors stationed at each nuclear power plant provide a high degree of assurance that all events meeting reporting criteria are reported to the NRC. In addition, the NRC conducts inspections if there is any indication that an exposure exceeded or could have exceeded a regulatory limit. Moreover, areas of the facility that may be subject to radiation contamination have monitors that record radiation levels. These monitors would immediately reveal any instances in which high levels of radiation exposure occurred.

Validation:

Given the nature of the process of using radioactive materials to generate power, overexposure to radiation is a potential danger from the operation of nuclear power plants. Such exposure to radiation that exceeds the applicable regulatory limits may potentially occur through either a nuclear accident or other malfunctions at the plant. Consequently, tracking the number of overexposures that occur at nuclear reactors is an important indicator of the degree to which safety is being maintained.

• number of radiological releases to the environment from nuclear reactors that exceed applicable regulatory limits, with a reactor safety target of less than or equal to 2⁵

⁵ Beginning in FY 2005, this measure is based upon AO Criterion I.A. Prior to FY 2005, the criterion was based upon a higher threshold of significant functional damage to organs or physiological systems. Using the pre-FY 2005 criteria, NRC reported zero events through FY 2004. However, it should be noted that if the FY 2005 performance measure, based upon AO Criterion I.A. had been in place in FY 2003, two materials events would have been reported for that fiscal year.

Verification:

As with worker overexposures, licensees report environmental releases of radioactive materials that exceed regulations or license conditions through the SCSS LER database maintained at the Oak Ridge National Laboratory. The SCSS database will be used to identify those LERs reporting releases, and the number of reported releases is then applied to this measure. The NRC also conducts periodic inspections of licensees to ensure that they properly monitor and control releases to the environment through effluent pathways. In addition, onsite monitors would record any instances in which the plant releases radiation into the environment. If the inspections or the monitors reveal any indication that an accident or inadvertent release has occurred, the NRC conducts follow-up inspections.

Validation:

The generation of nuclear power creates radioactive materials that are released into the environment in a controlled manner. These radioactive discharges are subject to regulatory controls that limit the quantity discharged and the resultant dose to members of the public. Consequently, the NRC tracks all releases of radioactive materials in excess of regulatory limits as a performance measure because large releases that exceed regulatory limits have the potential to endanger public safety or harm the environment. The NRC inspects every nuclear power plant for compliance with regulatory requirements and specific license conditions related to radiological effluent releases. The inspection program includes enforcement actions to be taken for violations of the regulations or license conditions, based on the severity of the event.

This performance measure includes dose values that are classified as being as low as reasonably achievable (ALARA), as defined in Appendix I, "Numerical Guides for Design Objectives and Limiting Conditions for Operation to Meet the Criterion 'As Low As Is Reasonably Achievable' For Radioactive Material in Light-Water-Cooled Nuclear Power

Reactor Effluents," to 10 CFR Part 50, "Domestic Licensing of Production and Utilization Facilities," as well as the public dose limits in 10 CFR Part 20, "Standards for Protection Against Radiation." Because the performance measure includes ALARA values, which are not safety limits, and because Appendix I to 10 CFR Part 50 allows licensees to temporarily exceed, for good reason, the ALARA dose values, the performance measure is 2.

GOAL 1 – SAFETY

Ensure protection of public health and safety and the environment.

Nuclear Material and Waste Safety

Strategic Outcomes:

- No inadvertent criticality events
- No acute radiation exposures resulting in fatalities
- No releases of radioactive materials that result in significant radiation exposures
- No releases of radioactive materials that cause significant adverse environmental impacts

Verification: Verification addresses the issues discussed below.

No inadvertent criticality events. Inadvertent criticality events must be reported, regardless of whether they result in exposures or injuries to workers or the public and regardless of whether they result in adverse impacts to the environment. Licensees immediately report criticality events to the NRC Headquarters Operations Center by telephone through the cognizant licensee safety officer. Follow-up written reports must be submitted to the NRC within 30 days of the initial report. Such reports must contain specific information concerning the event, as specified by 10 CFR 70.50(c)(2) and 10 CFR 76.120(d)(2). The NRC then dispatches an inspection team to confirm the reliability of the data. The event

is also tracked through NMED. The NRC would immediately investigate and follow up on an event of this nature.

If an event meeting this threshold occurs, it would be reported to the NRC through a number of sources, but primarily through required licensee notifications. Event notifications and preliminary notifications, which are used to widely disseminate the information to internal and external stakeholders, summarize these events. For activities of the Office of Nuclear Material Safety and Safeguards (NMSS) and the Office of Federal and State Materials and Environmental Management Programs (FSME), NMED is an essential system used to collect information on such events.

The fuel cycle, materials, high-level waste repository, and spent fuel storage and transportation inspection programs are key elements in verifying the completeness and accuracy of licensee reports. The Integrated Materials Performance Evaluation Program (IMPEP) also provides a mechanism to verify that NRC regions are consistently and properly collecting and reporting such events as received from the licensees and entering them in NMED.

The NRC has taken a number of steps to improve the timeliness and completeness of materials event data. These steps include assessment of NMED data during monthly staff reviews; emphasis and analysis during the IMPEP reviews; NMED training in headquarters, the regions, and Agreement States; and discussions at all Agreement State and Conference of Radiation Control Program Directors (CRCPD) meetings.

Validation:

Events collected under this strategic outcome are actual occurrences of accidental criticality. Such events could compromise public health and safety, the environment, and the common defense and security. Events of this magnitude are not expected and would be rare. If such an event occurs, it would result in a prompt and thorough investigation of its consequences, its root causes, and the necessary

actions by the licensee and the NRC to mitigate the situation and prevent recurrence. Therefore, the strategic outcome of no inadvertent criticalities represents a valid measure of ensuring adequate protection of public health and safety.

In assessing the validity of the data collected as appropriate for the strategic outcome, the staff has determined that a logical relationship exists between the data collected and the strategic outcome. Given the magnitude and rarity of a criticality event, the NRC believes that the probability of being unaware of an inadvertent criticality is very small.

Verification: Verification addresses the issues discussed below.

No acute radiation exposures resulting in fatalities. Determining whether a death resulted from acute radiation exposure is fundamentally essential to ensure the protection of public health and safety.

If an event meeting this threshold occurs, it would be reported to the NRC and/or Agreement States through a number of sources, but primarily through required licensee notifications. Event notifications and preliminary notifications, which are used to widely disseminate the information to internal and external stakeholders, summarize these events. For activities of NMSS and FSME, NMED is an essential system used to collect information on such events.

The fuel cycle, materials, high-level waste repository, decommissioning, and spent fuel storage and transportation inspection programs are key elements in verifying the completeness and accuracy of licensee reports. The IMPEP also provides a mechanism to verify that Agreement States and NRC regions are consistently collecting and reporting such events as received from the licensees and entering them in NMED.

The NRC has taken a number of steps to improve the timeliness and completeness of materials event data. These steps include assessment of NMED data during monthly staff reviews; emphasis and analysis during

the IMPEP reviews; NMED training in headquarters, the regions, and Agreement States; and discussions at all Agreement State and CRCPD meetings.

Validation:

There is a logical basis for using no acute radiation exposures resulting in fatalities as a strategic outcome for ensuring the protection of public health and safety. The NRC's regulatory process—including licensing, inspection, guidance, regulations, and enforcement activities—is sufficient to ensure that no fatalities are attributable to acute radiation exposure.

Events of this magnitude are not expected and would be rare. In the unlikely event that a death occurs, the NRC or Agreement State technical specialists, with input from expert consultants as necessary, decide whether to ascribe the cause of a death to (1) conditions related to acute radiation exposures or (2) exposure to other radioactive hazardous materials (for fuel cycle activities, this extends to other hazardous materials used with, or produced from, licensed material consistent with 10 CFR Part 70, "Domestic Licensing of Special Nuclear Material").

The NRC believes that the data collected to meet this strategic outcome are free from bias. NMSS and FSME do not use statistical sampling of data to determine results. Rather, they review all events data to determine whether the strategic outcome has been met.

Two important data limitations in determining this strategic outcome are the delay time for receiving information and/or the failure of the NRC to become aware of an event that results in a fatality. Although NMSS and FSME procedures and NRC regulations associated with event reporting include specific requirements for timely notifications, a lag time separates the occurrence of an event and the known consequences of that event.

The NRC believes that the probability of being unaware of a fatality attributable to acute radiation exposure is very small. Periodic licensee inspections

and regulatory reporting requirements are sufficient to ensure that an event of this magnitude would become known.

If such an event occurs, it would result in a prompt and thorough investigation of the event, its consequences, its root causes, and the necessary actions by the licensee and the NRC to mitigate the situation and prevent recurrence. In addition to these immediate actions, the NRC holds periodic meetings where staff and management review events that appear to meet this strategic outcome.

Verification: Verification addresses the issues discussed below.

No releases of radioactive materials that result in significant radiation exposures. NMSS and FSME define this strategic outcome as any discharge or dispersal of radioactive materials from the intended place of confinement—or discharge or dispersal of radioactive wastes during storage, transport, or disposal—that causes significant radiation exposures to a member of the public or occupational worker that directly result in unintended permanent functional damage to an organ or physiological system, as determined by a physician in accordance with AO Criterion I.A.3. (This metric does not include exposures from sealed sources. Exposure from sealed sources would fall under the performance measure for number of events with radiation exposures to the public and occupational workers from radioactive material that exceed AO Criterion I.A.)

If an event meeting this threshold occurs, it would be reported to the NRC and/or Agreement States through a number of sources, but primarily through required licensee notifications. Event notifications and preliminary notifications, which are used to widely disseminate the information to internal and external stakeholders, summarize these events. For activities of NMSS and FSME, NMED is an essential system used to collect information on such events.

The fuel cycle, materials, high-level waste repository, decommissioning, and spent fuel storage and

transportation inspection programs are key elements in verifying the completeness and accuracy of licensee reports. The IMPEP also provides a mechanism to verify that Agreement States and NRC regions are consistently collecting and reporting such events as received from the licensees and entering them in NMED.

The NRC has taken a number of steps to improve the timeliness and completeness of materials event data. These steps include assessment of NMED data during monthly staff reviews; emphasis and analysis during the IMPEP reviews; NMED training in headquarters, the regions, and Agreement States; and discussions at all Agreement State and CRCPD meetings.

Validation:

There is a logical basis for using a threshold of no releases of radioactive materials that result in significant radiation exposures as a strategic outcome for ensuring the protection of public health and safety. Significant radiation exposures are defined as those that result in unintended permanent functional damage to an organ or a physiological system, as determined by a physician in accordance with AO Criterion I.A.3. The NRC's regulatory process—including licensing, inspection, guidance, regulations, and enforcement activities—is sufficient to ensure that there are no releases of radioactive materials that result in significant radiation exposures.

Events of this magnitude are not expected and would be rare. In the unlikely event that a significant exposure occurs, NRC or Agreement State technical specialists, with input from expert consultants as necessary, decide whether to ascribe the permanent functional damage to (1) conditions related to acute radiation exposures or (2) exposure to other radioactive hazardous materials (for fuel cycle activities, this extends to other hazardous materials used with, or produced from, licensed material consistent with 10 CFR Part 70).

The NRC believes that the data collected to meet this strategic outcome are free from bias. NMSS and FSME

do not use statistical sampling of data to determine results. Rather, they review all event data to determine whether the strategic outcome has been met.

Two important data limitations in determining this strategic outcome are the delay time for receiving information and/or the failure of the NRC to become aware of an event that results in significant radiation exposures. Although NMSS and FSME procedures and NRC regulations associated with event reporting include specific requirements for timely notifications, a lag time separates the occurrence of an event and the known consequences of that event.

The NRC believes that the probability of being unaware of an event that results in significant radiation exposures is very small. Periodic licensee inspections and regulatory reporting requirements are sufficient to ensure that an event of this magnitude would become known.

If such an event occurs, it would result in a prompt and thorough investigation of the event, its consequences, its root causes, and the necessary actions by the licensee and the NRC to mitigate the situation and prevent recurrence. In addition to these immediate actions, the NRC holds periodic meetings where staff and management review events that appear to meet this strategic outcome.

Verification: Verification addresses the issues discussed below.

No releases of radioactive materials that cause significant adverse environmental impacts. Releases that have the potential to cause adverse environmental impacts are currently undefined. The NRC will use as a surrogate any discharge or dispersal of radioactive materials from the intended place of confinement—or discharge or dispersal of radioactive wastes during storage, transport, or disposal—that exceeds the limits for reporting AOs in AO Criterion I.B.

If an event meeting this threshold occurs, it would be reported to the NRC and/or Agreement States through a number of sources, but primarily through

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required licensee notifications. Event notifications and preliminary notifications, which are used to widely disseminate the information to internal and external stakeholders, summarize these events. For NMSS activities, NMED is an essential system used to collect information on such events.

The fuel cycle, materials, high-level waste repository, decommissioning, and spent fuel storage and transportation inspection programs are key elements in verifying the completeness and accuracy of licensee reports. The IMPEP also provides a mechanism to verify that Agreement States and NRC regions are consistently collecting and reporting such events as received from the licensees and entering them in NMED.

The NRC has taken a number of steps to improve the timeliness and completeness of materials event data. These steps include assessment of NMED data during monthly staff reviews; emphasis and analysis during the IMPEP reviews; NMED training in headquarters, the regions, and Agreement States; and discussions at all Agreement State and CRCPD meetings.

Validation:

There is a logical basis for using releases of radioactive materials that cause significant adverse environmental impacts as a strategic outcome for ensuring the protection of the environment. Releases that have the potential to cause adverse environmental impacts are those that exceed the limits for reporting AOs in AO Criterion I.B.1. The NRC's regulatory process—including licensing, inspection, guidance, regulations, and enforcement activities—is sufficient to ensure that there are no releases of radioactive materials that cause significant adverse environmental impacts.

Events of this magnitude are not expected and would be rare. In the unlikely event of a release of radioactive materials (for fuel cycle activities, this extends to other hazardous materials used with, or produced from, licensed material consistent with 10 CFR Part 70), NRC or Agreement State technical

specialists, with input from expert consultants as necessary, decide whether the release caused a significant adverse environmental impact.

The NRC believes that the data collected to meet this strategic outcome are free from bias. NMSS and FSME do not look at statistical sampling of data to determine results. Rather, they review all event data to determine whether the strategic outcome has been met.

Two important data limitations in determining this strategic outcome are the delay time for receiving information and/or the failure of the NRC to become aware of an event that causes significant adverse environmental impacts. Although NMSS and FSME procedures and NRC regulations associated with event reporting include specific requirements for timely notifications, a lag time separates the occurrence of an event and the known consequences of that event.

The NRC believes that the probability of being unaware of an event that causes significant adverse environmental impacts is very small. Periodic licensee inspections and regulatory reporting requirements are sufficient to ensure that an event of this magnitude would become known.

If such an event occurs, it would result in a prompt and thorough investigation of the event, its consequences, its root causes, and the necessary actions by the licensee and the NRC to mitigate the situation and prevent recurrence. In addition to these immediate actions, the NRC holds periodic meetings where staff and management review events that appear to meet this strategic outcome.

Performance Measure:

 number of events with radiation exposures to the public and occupational workers from radioactive material that exceed AO Criteria I.A, with a materials safety target of less than or equal to 6 and a waste safety target of 0

Verification:

This performance measure includes any event involving licensed radioactive materials that results in significant radiation exposures to members of the public and/or occupational workers that exceed the dose limits in the AO reporting criteria. Because of the extremely high doses employed during medical applications of radioactive materials, it is also appropriate to use a radiation exposure that results in unintended permanent functional damage to an organ or a physiological system (as determined by a physician) as a criterion for this measure. AO Criterion I.A is the basis for this measure.

If an event meeting this threshold occurs, it would be reported to the NRC and/or Agreement States through a number of sources, but primarily through required licensee notifications. Event notifications and preliminary notifications, which are used to widely disseminate the information to internal and external stakeholders, summarize these events. For activities of NMSS and FSME, NMED is an essential system used to collect information on such events.

The fuel cycle, materials, high-level waste repository, decommissioning, and spent fuel storage and transportation inspection programs are key elements in verifying the completeness and accuracy of licensee reports. The IMPEP also provides a mechanism to verify that Agreement States and NRC regions are consistently collecting and reporting such events as received from the licensees and are entering them in NMED.

The NRC has taken a number of steps to improve the timeliness and completeness of materials event data. These steps include assessment of the NMED data during monthly staff reviews; emphasis and analysis during the IMPEP reviews; NMED training in headquarters, the regions, and Agreement States; and discussions at all Agreement State and CRCPD meetings.

Validation:

There is a logical basis for using events involving radiation exposures to the public and occupational workers from radioactive material that exceed AO Criterion I.A as a performance measure for ensuring the protection of public health and safety. An event is considered an AO if it is determined to be significant from the standpoint of public health or safety. The NRC's regulatory process—including licensing, inspection, guidance, regulations, and enforcement activities—is designed to mitigate the likelihood of an event that would exceed AO Criterion I.A.

Events of this magnitude are rare. In the unlikely event that an AO occurs, NRC or Agreement State technical specialists, with input from expert consultants as necessary, will confirm whether the criteria were met.

The NRC believes that the data collected to meet this performance measure are free from bias. NMSS and FSME do not use statistical sampling of data to determine results. Rather, they review all event data to determine whether the performance measure has been met.

Two important data limitations in determining this performance measure are the delay time for receiving information and/or the failure of the NRC to become aware of an event that causes significant radiation exposures to the public or occupational workers. Although NMSS and FSME procedures and NRC regulations associated with event reporting include specific requirements for timely notifications, a lag time separates the occurrence of an event and the known consequences of that event.

The NRC believes that the probability of being unaware of an event that causes significant radiation exposures to the public or occupational workers is very small. Periodic licensee inspections and

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regulatory reporting requirements are sufficient to ensure that an event of this magnitude would become known.

If such an event occurs, it would result in a prompt and thorough investigation of the event, its consequences, its root causes, and the necessary actions by the licensee and the NRC to mitigate the situation and prevent recurrence. In addition to these immediate actions, the NRC holds periodic meetings where staff and management validate the occurrence of these events.

 number of radiological releases to the environment that exceed applicable regulatory limits, with a materials safety target of less than or equal to 5 and a waste safety target of 0

Verification:

This performance measure is defined as any release to the environment from fuel cycle, materials, high-level waste repository, decommissioning, and spent fuel storage and transportation activities that exceeds applicable regulations, as defined in 10 CFR 20.2203(a)(3). A 30-day written report is required regarding such releases. The nuclear materials safety performance measure target is less than or equal to five releases a year that meet this reporting criteria. The nuclear waste safety target is no releases that meet this reporting criteria.

If an event meeting this threshold occurs, it would be reported to the NRC and/or Agreement States through a number of sources, but primarily through required licensee notifications. Event notifications and preliminary notifications, which are used to widely disseminate the information to internal and external stakeholders, summarize these events. For activities of NMSS and FSME, NMED is an essential system used to collect information on such events.

The fuel cycle, materials, high-level waste repository, decommissioning, and spent fuel storage and transportation inspection programs are key elements in verifying the completeness and accuracy of licensee reports. The IMPEP also provides a mechanism to verify that Agreement States and NRC regions are consistently collecting and reporting such events as received from the licensees and entering them in NMED.

The NRC has taken a number of steps to improve the timeliness and completeness of materials event data. These steps include assessment of NMED data during monthly staff reviews; emphasis and analysis during the IMPEP reviews; NMED training in headquarters, the regions, and Agreement States; and discussions at all Agreement State and CRCPD meetings.

Validation:

The regulations in 10 CFR Part 20 provide standards for protection against radiation. There is a logical basis for tracking releases subject to the 30-day reporting requirement under 10 CFR 20.2203(a)(3)(ii) as a performance measure for ensuring the protection of the environment. The NRC's regulatory process—including licensing, inspection, guidance, regulations, and enforcement activities is sufficient to ensure that releases of radioactive materials that exceed regulatory limits are infrequent.

In the unlikely event that a release to the environment exceeds regulatory limits, the NRC or Agreement State technical specialists, with input from expert consultants as necessary, will confirm whether the criteria were met.

The NRC believes that the data collected to meet this performance measure are free from bias. NMSS and FSME do not look at statistical sampling of data to determine results. Rather, they review all event data to determine whether the performance measure has been met.

Two important data limitations in determining this performance measure are the delay time for receiving information and/or the failure of the NRC to become aware of an event that causes environmental impacts. Although NMSS and FSME procedures and NRC regulations associated with event reporting include specific requirements for timely notifications, a lag time separates the occurrence of an event and the known consequences of that event.

The NRC believes that the probability of being unaware of an event that causes a radiological release to the environment that exceeds applicable regulations is very small. Periodic licensee inspections and regulatory reporting requirements are sufficient to ensure that an event of this magnitude would become known.

If such an event occurs, it would result in a prompt and thorough investigation of the event, its consequences, its root causes, and the necessary actions by the licensee and the NRC to mitigate the situation and prevent recurrence. In addition to these immediate actions, the NRC holds periodic meetings where staff and management validate the occurrence of these events.

GOAL 2 - SECURITY

Ensure the secure use and management of radioactive materials.

Strategic Outcome:

• No instances where licensed radioactive materials are used domestically in a manner hostile to the security of the United States

Performance Measure:

• Unrecovered losses or thefts of risk-significant⁶ radioactive sources is 0.

Under FY 2007 AO Criterion I.C.1, the agency counts any unrecovered lost, stolen, or abandoned sources that exceed the values listed in Appendix P, "Category 1 and 2 Radioactive Material," to 10 CFR Part 110, "Export and Import of Nuclear Equipment and Material." Excluded from reporting under this criterion are those events involving sources that are lost, stolen, or abandoned under certain conditions, specifically (1) sources abandoned in accordance with the requirements of 10 CFR 39.77(c), (2) sealed sources contained in labeled, rugged source housings, (3) recovered sources with sufficient indication that doses in excess of the reporting thresholds specified in AO Criteria I.A.1 and I.A.2 did not occur during the time the source was missing, (4) unrecoverable sources lost under such conditions that doses in excess of the reporting thresholds specified in AO Criteria I.A.1 and I.A.2 were not known to have occurred, and (5) other sources that are lost or abandoned and declared unrecoverable: for which the agency has determined that the risk-significance of the source is low based on the location (e.g., water depth) or physical characteristics (e.g., half life, housing) of the source and its surroundings; where all reasonable efforts have been made to recover the source; and where it has been determined that the source is not recoverable and would not be considered a realistic safety or security risk under this measure.

Verification:

Losses or thefts of radioactive material that are greater than or equal to 1000 times the quantity specified in Appendix C, "Quantities of Licensed Material Requiring Labeling," to 10 CFR Part 20 must be

[&]quot;Risk-significant" is defined as any unrecovered lost or abandoned sources that exceed the values listed in "Appendix P to 10 CFR Part 110–High Risk Radioactive Material, Category 2." Excluded from reporting under this criterion are those events involving sources that are lost or abandoned under the following conditions: (1) sources abandoned in accordance with the requirements of 10 CFR 39.77(c); (2) recovered sources with sufficient indication that doses in excess of the reporting thresholds specified in AO Criteria I.A.1 and I.A.2 did not occur during the time the source was missing; (3) unrecoverable sources lost under such conditions that doses in excess of the reporting thresholds specified in AO Criteria I.A.1 and I.A.2 were not known to have occurred; (4) other sources that are lost or abandoned and declared unrecoverable; (5) for which the agency has made a determination that the risk-significance of the source is low based upon the location (e.g., water depth) or physical characteristics (e.g., half life, housing) of the source and its surroundings; (6) where all reasonable efforts have been made to recover the source; and (7) it has been determined that the source is not recoverable and will not be considered a realistic safety or security risk under this measure.

reported (per 10 CFR 20.2201(a)) by telephone to the NRC Headquarters Operations Center or Agreement State immediately (interpreted as within 4 hours) if the licensee believes that an exposure could result to persons in unrestricted areas. If an event meeting the thresholds described above occurs, it would be reported through a number of sources, but primarily through this required licensee notification. Events that are publicly available are then entered and tracked in NMED, which is an essential system used to collect and store information on such events. Separate methods are used to track events that are not publicly available. Additionally, licensees must meet the reporting and accounting requirements in 10 CFR Part 73, "Physical Protection of Plants and Materials," and 10 CFR Part 74, "Material Control and Accounting of Special Nuclear Material."

The NRC's inspection programs are key elements in verifying the completeness and accuracy of licensee reports. The IMPEP also provides a mechanism to verify that Agreement States and NRC regions are consistently collecting and reporting such events as received from the licensees and are entering these events in NMED. In some cases, upon receiving a report, the NRC or Agreement State initiates an independent investigation that verifies the reliability of the reported information. When performed, these investigations enable the NRC or Agreement State to verify the accuracy of the reported data.

The regulation in 10 CFR 20.2201(b) requires a 30-day written report for lost or stolen sources that are greater than or equal to 10 times the quantity specified in Appendix C to 10 CFR Part 20 if the source is still missing at that time. In addition, 10 CFR 20.2201(d) requires an additional written report within 30 days of a licensee learning any additional substantive information. The NRC interprets this requirement as including reporting recovery of sources.

The NRC issued guidance in the form of a regulatory information summary (RIS 2005-21) to clarify the current 10 CFR 20.2201(d) requirement for reporting

recovery of a risk-significant source. FSME will ask the Agreement States to send copies of the RIS (or equivalent document) to their licensees. The NRC issued the National Source Tracking System final rule in November 2006. Implementation of this system will create and maintain an inventory of risksignificant sources. This rulemaking codifies and clarifies reporting requirements for risk-significant sources (including reporting timeframes) by adding specific requirements to 10 CFR 20.2201, "Reports of Theft or Loss of Licensed Material," for risk-significant sources, including a requirement for licensees to report the recovery of a risk-significant source within 30 days of recovery. In conjunction with this rulemaking, FSME will modify its Procedure SA-300 to specifically require Agreement States to report the recovery of a risk-significant source immediately to the NRC Headquarters Operations Center when notified by a licensee.

Validation:

Events collected under this performance measure are actual losses, thefts, or diversions of materials described above. Such events could compromise public health and safety, the environment, and the common defense and security. Events of this magnitude are expected to be rare. The information reported under 10 CFR Part 73 and 10 CFR Part 74 is required so that the NRC is aware of events that could endanger public health and safety or national security. Any failures at the level of the strategic plan would result in immediate investigation and follow-up.

If an event subject to the reporting requirements described above occurs, it would result in a prompt and thorough investigation of the event, its consequences, its root causes, and the necessary actions by the licensee, the NRC, and/or an Agreement State to mitigate the situation and prevent recurrence.

 Number of substantiated⁷ cases of actual theft or diversion of licensed risk-significant radioactive

[&]quot;Substantiated" means a situation where an indication of loss, theft or unlawful diversion such as: an allegation of diversion, report of lost or stolen material, statistical processing difference, or other indication of loss of material control or accountability cannot be refuted following an investigation; and requires further action on the part of the agency or other proper authorities.

sources or a formula quantity 8 of special nuclear material or act that results in radiological sabotage is $0^{9, 10}$

Verification:

Substantiated means a situation where an indication of loss, theft or unlawful diversion such as: an allegation of diversion, report of lost or stolen material, statistical processing difference, or other indication of loss of material control or accountability cannot be refuted following an investigation; and requires further action on the part of the agency or other proper authorities. Licensees are required to call the NRC to report any breaches of security or other event that may potentially lead to theft or diversion of material or sabotage at a nuclear facility within 1 hour of its occurrence. The NRC's safeguards requirements are described in Section 73.71 of 10 CFR Part 73, "Physical Protection of Plants and Materials," and Appendix G to 10 CFR Part 73, "Reportable Safeguards Events," and in 10 CFR Part 74.11. The Information Assessment Team comprised of NRC Headquarters and Regional staff would conduct an immediate assessment for any significant events to determine what further actions are needed, including coordination with the intelligence community and law enforcement. The licensee is also required to file a written report within 30 days of the incident to describe the incident and the steps that the licensee took to protect the nuclear facility. This information would enable the NRC to adequately assess whether radiological sabotage has occurred. Any strategic plan failure results in immediate investigation and follow-up.

Validation:

Events that are required to be reported are those that endanger nuclear reactor facilities by deliberate acts of theft or diversion of material or sabotage directed against those facilities. Events of this type are extremely rare. If such an event occurred, it would result in a prompt and thorough investigation

of the event, its consequences, its root causes, and the necessary actions by the licensee and/or NRC to mitigate the situation and prevent recurrence. The investigation ensures the validity of the information and assesses the significance of the event.

Verification:

In FY 2007 AO Criterion I.C.2, "substantiated" means a situation that requires additional action by the agency or other proper authorities because of an indication of loss, theft, or unlawful diversion such as an allegation of diversion, report of lost or stolen material, statistical processing difference, or other indication of loss of material control or accountability—that cannot be refuted following an investigation. A formula quantity of special nuclear material is defined in 10 CFR 70.4, "Definitions." Radiological sabotage is defined in 10 CFR 73.2, "Definitions." Licensees subject to the requirements of 10 CFR Part 73 must call the NRC within 1 hour of an occurrence, to report any breaches of security or other event that may potentially lead to theft or diversion of material or to sabotage at a nuclear facility. The NRC's safeguards requirements are described in 10 CFR 73.71, "Reporting of Safeguards Events"; Appendix G, "Reportable Safeguards Events," to 10 CFR Part 73; and 10 CFR 74.11, "Reports of Loss or Theft or Attempted Theft or Unauthorized Production of Special Nuclear Material." The information assessment team composed of NRC Headquarters and regional staff members would conduct an immediate assessment for any significant events to determine any further actions that are needed, including coordination with the intelligence community and law enforcement. In accordance with 10 CFR 73.71(d), the licensee must also file a written report within 60 days of the incident describing the event and the steps that the licensee took to protect the nuclear facility. This information will enable the NRC to adequately assess whether radiological sabotage has occurred.

⁸ A formula quantity of special nuclear material is defined in 10 CFR 70.4.

⁹ "Radiological sabotage" is defined in 10 CFR 73.2.

¹⁰ Security goal performance measures 2, 3, and 4 together encompass the discontinued performance measure "Number of security events and incidents that exceed the Abnormal Occurrence Criterion I.C 2-4" to provide greater clarity and detail.

Validation:

Events subject to reporting requirements are those that endanger the public health and safety and the environment through deliberate acts of theft or diversion of material or through sabotage directed against the nuclear facilities that the agency licenses. Events of this type are extremely rare. If such an event occurs, it would result in a prompt and thorough investigation of the event, its consequences, its root causes, and the necessary actions by the licensee and/or the NRC to mitigate the situation and prevent recurrence. The investigation ensures the validity of the information and assesses the significance of the event.

• Number of substantiated losses of a formula quantity of special nuclear material or substantiated inventory discrepancies of a formula quantity of special nuclear material that are judged to be significant relative to normally expected performance or regulatory limits and that are judged to be caused by theft or diversion or substantial breakdown of the accountability system is 0.

Verification:

Licensees must record events associated with FY 2007 AO Criterion I.C.3 within 24 hours of the identified event in a safeguards log maintained by the licensee. The licensee must retain the log as a record for 3 years after the last entry is made or until termination of the license. The NRC relies on its safeguards inspection program to ensure the reliability of recorded data. The NRC makes a determination of whether a substantiated breakdown has resulted in a vulnerability to radiological sabotage, theft, diversion, or unauthorized enrichment of special nuclear material. When making substantiated breakdown determinations, the NRC evaluates the materials event data to ensure that licensees are reporting and collecting the proper event data.

Validation:

"Substantiated" means a situation that requires additional action by the agency or other proper authorities because of an indication of loss, theft, or unlawful diversion—such as an allegation of diversion, report of lost or stolen material, statistical processing difference, other system breakdown closely related to the material control and accounting program (such as an item control system associated with the licensee's facility information technology system), or other indication of loss of material control or accountability—that cannot be refuted following an investigation. A formula quantity of special nuclear material is defined in 10 CFR 70.4. Events collected under this performance measure may indicate a vulnerability to radiological sabotage, theft, diversion, or loss of special nuclear materials. Such events could compromise public health and safety, the environment, and the common defense and security. The NRC relies on its safeguards inspection program to help validate the reliability of recorded data and determine whether a breakdown of a physical protection or material control and accounting system has actually resulted in a vulnerability.

• Number of substantial breakdowns¹¹ of physical security or material control (i.e., access control containment or accountability systems) that significantly weaken the protection against theft, diversion, or sabotage is 0.

Verification:

For FY 2007 AO Criterion I.C.4, a "substantial breakdown" is defined as a red finding in the security oversight program or significant performance problems and/or operational events resulting in a determination of overall unacceptable performance or in a shutdown condition (inimical to the effective functioning of the Nation's critical infrastructure). Radiological sabotage is defined in 10 CFR 73.2. Licensees are required to report to the NRC,

[&]quot;Substantial breakdown" is defined as a red finding in the security inspection program, or any plant or facility determined to have overall unacceptable performance, or in a shutdown condition (inimical to the effective functioning of the nation's critical infrastructure) as a result of significant performance problems and/or operational events.

immediately after the occurrence becomes known, any known breakdowns of physical security, based on the requirements in 10 CFR 73.71 and Appendix G to 10 CFR Part 73. If a licensee reports such an event, the headquarters operations officer prepares an official record of the initial event report. The NRC begins responding to such an event immediately upon notification, with the activation of its information assessment team. A licensee must follow its initial telephone notification with a written report submitted to the NRC within 30 days.

The licensee records breakdowns of physical protection resulting in a vulnerability to radiological sabotage, theft, diversion, or loss of special nuclear materials or radioactive waste within 24 hours in a safeguards log maintained by the licensee. The licensee must retain the log as a record for 3 years after the last entry is made or until termination of the license. Licensees subject to 10 CFR Part 73 must also meet the reporting requirements detailed in 10 CFR 73.71. The NRC evaluates all of the reported events based on the criteria in 10 CFR 73.71 and Appendix G to 10 CFR Part 73. The NRC also maintains and relies on its safeguards inspection program to ensure the reliability of recorded and reported data.

Validation:

Events assessed under this performance measure are those that threaten nuclear activities by deliberate acts, such as radiological sabotage, directed against facilities. If a licensee reports such an event, the information assessment team evaluates and validates the initial report and determines any further actions that may be necessary. Tracking breakdowns of physical security indicates whether the licensee is taking the necessary security precautions to protect the public, given the potential consequences of a nuclear accident attributable to sabotage or the inappropriate use of nuclear material either in this country or abroad.

Events collected under this performance measure may indicate a vulnerability to radiological sabotage,

theft, diversion, or loss of special nuclear materials or radioactive waste. Such events could compromise public health and safety, the environment, and the common defense and security. The NRC relies on its safeguards inspection program to help validate the reliability of recorded data and determine whether a breakdown of a physical protection or material control and accounting system has actually resulted in a vulnerability.

 Number of significant unauthorized disclosures (loss, theft, and/or deliberate acts) of classified and/ or safeguards information is 0.¹²

Verification:

With regard to FY 2007 AO Criterion I.C.5, any alleged or suspected violations by NRC licensees of the Atomic Energy Act, Espionage Act, or other Federal statutes related to classified or safeguards information must be reported to the NRC under the requirements of 10 CFR 95.57(a) (for classified information), 10 CFR Part 73 (for safeguards information), and NRC orders (for safeguards information subject to modified handling requirements). However, for performance reporting, the NRC would only count those disclosures or compromises that actually cause damage to the national security or to public health and safety. Such events would be reported to the cognizant security agency (i.e., the security agency with jurisdiction) and the regional administrator of the appropriate NRC regional office, as listed in Appendix A, "U.S. Nuclear Regulatory Commission Offices and Classified Mailing Addresses," to 10 CFR Part 73. The regional administrator would then contact the Division of Security Operations at NRC Headquarters, which would assess the violation and notify other NRC offices and other Government agencies, as appropriate. A determination would be made as to whether the compromise damaged the national security or public health and safety. Any unauthorized disclosures or compromises of classified or safeguards information that damage the national security or public health and safety would result

[&]quot;Significant unauthorized disclosure" is defined as a disclosure that harms national security or public health and safety.

APPENDIX E

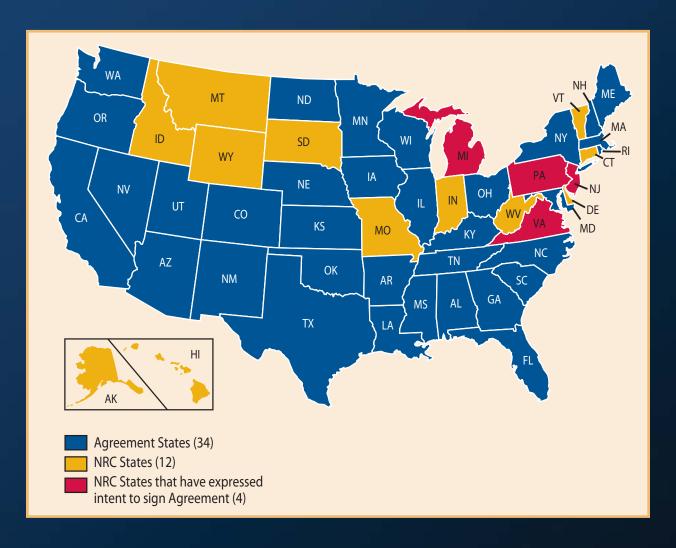
in immediate investigation and follow-up by the NRC. In addition, NRC inspections will verify that licensees' routine handling of classified and safeguards information (including safeguards information subject to modified handling requirements) conforms to established security information management requirements.

Any alleged or suspected violations of this performance measure by NRC employees, contractors, or other personnel would be reported in accordance with NRC procedures to the Director of Division of Facilities and Security at NRC Headquarters. The NRC maintains a strong system of controls over national security and safeguards information, including (1) annual required training for all employees, (2) safe and secure document storage, and (3) physical access control in the form of guards and badged access.

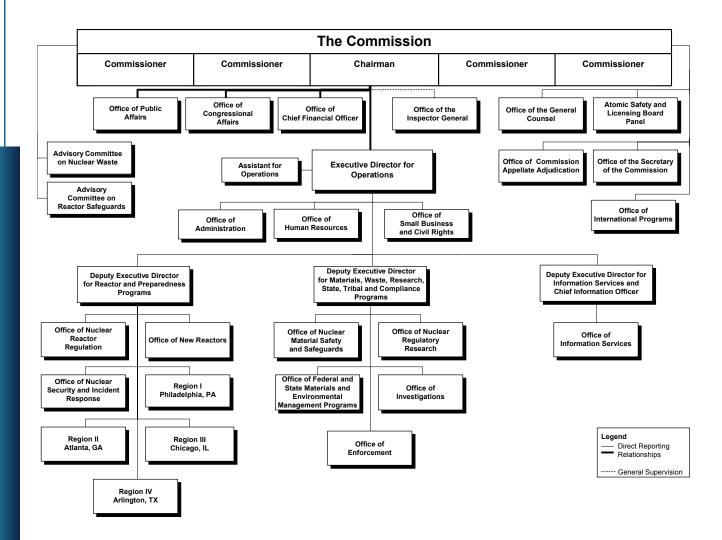
Validation:

Events collected under this performance measure are unauthorized disclosures of classified or safeguards information that damage the national security or public health and safety. Events of this magnitude are not expected and would be rare. If such an event occurs, it would result in a prompt and thorough investigation, including consequences, root causes, and necessary actions by the licensees and the NRC to mitigate the consequences and prevent recurrence. NRC investigation teams also validate the materials event data to ensure that licensees are reporting and collecting the proper event data.

AGREEMENT STATES (AS OF AUGUST 2007)



NRC ORGANIZATION CHART (AS OF AUGUST 2007)



GLOSSARY OF ACRONYMS		EDO	Executive Director for Operations	
ADAMS	Agencywide Documents Access and	EFT	electronic funds transfer	
	Management System	e-gov	electronic Government	
AICPA	American Institute of Certified Public Accountants	EO	Executive Order	
AO	abnormal occurrence	EPA	Environmental Protection Agency	
ASP	accident sequence precursor	E-QIP	Electronic Questionnaires for Investigations Processing	
ВСР	Business Continuity Plan	ESP	Early Site Permits	
CCR	Central Contractor Registration	FACTS I	Federal Agencies' Centralized Trial	
CE	Combustion Engineering Owner's		Balance System	
OD A D	Group	FAR	Federal Acquisition Regulation	
CEAR	Certificate of Excellence in Accountability Reporting	FECA	Federal Employees Compensation Act	
CFO	Chief Financial Officer	FEMA	Federal Emergency Management	
CFO Act	Chief Financial Officer Act of 1990	PEDC	Agency	
CFR United States Code of Federal		FERS FFMIA	Federal Employees Retirement System	
	Regulations		Federal Financial Management Improvement Act	
CIO	Chief Information Officer	FFS	Federal Financial System	
CIOC	CIO Council	FICA	Federal Insurance Contribution Act	
COLs	Combined Operating Licenses	FISMA	Federal Information Security	
CPIC	Capital Planning Investment Control	FISMA	Management Act	
CSRS	Civil Service Retirement System	FMFIA	Federal Managers' Financial Integrity	
CY	calendar year		Act of 1982	
DHS	U.S. Department of Homeland	FOIA	Freedom of Information Act	
	Security	FPPS	Federal Personnel and Payroll System	
DOE	U.S. Department of Energy	FSIO	Financial System Integration Office	
DOI	U.S. Department of Interior	FSME	Office of Federal and State Materials	
DOL	U.S. Department of Labor		and Environmental Management Programs	
EC	Executive Council	FTE	-	
ECIC	Executive Committee on Internal		Full-Time Equivalent	
	Control	FY	fiscal year	

APPENDIX H

GAO	GAO U.S. Government Accountability Office		information technology	
GFE	Generic Fundamentals Examination	JFMIP	Joint Financial Management Information Program	
GFRS	Governmentwide Financial Reporting	LMS	Learning Management System	
GLTS	System Conoral License Tracking System	LSN	Licensing Support Network	
	General License Tracking System	MC&A	material control and accounting	
GPEA	Government Paperwork Elimination Act	MD	Management Directive	
GPRA	Government Performance and	MOX	mixed-oxide fuel	
	Results Act	MWe	Megawatts electric	
GSA GSI	General Services Administration General Safety Issue	NARA	U.S. National Archive and Records Administration	
HHS	Health and Human Services	NBC	National Business Center	
HLW	High-Level Waste	NFPA	National Fire Protection Association	
HSPD	Homeland Security Presidential Directive	NIST	U.S. National Institute of Standards and Technology	
HSPD-12	Homeland Security Presidential Directive 12	NMED	Nuclear Materials Event Database	
IAEA	International Atomic Energy Agency	NMMSS	Nuclear Materials Management and Safeguards System	
IG	Inspector General	NMSS	Office of Nuclear Material Safety and	
IMPEP	\mathcal{E}		Safeguards	
Imamuorramaant	Evaluation Program	NRC	U.S. Nuclear Regulatory Commission	
Improvement Act	Federal Financial Management Improvement Act of 1996	NRR	Office of Nuclear Reactor Regulation	
Integrity Act	Federal Managers' Financial Integrity	NRO	Office of New Reactors	
	Act of 1982	NSIR	Office of Nuclear Security and	
IOAA	Independent Offices Appropriation Act	NICTIC	Incident and Response	
IPAC	Intragovernment Payment and	NSTS	National Source Tracking System	
	Collection	NUREG	Nuclear Regulatory Commission Regulation	
IPSS	Integrated Personnel Security System	NWF	Nuclear Waste Fund	
IRM	incident response manual	OBRA-90	Omnibus Budget Reconciliation Act	
ISA	integrated safety analysis		of 1990	

OCFO	Office of the Chief Financial Officer	RLO	records liaison officer
OEDO	Office of the Executive Director for	RMG	records management guideline
OIG	Operations Office of the Inspector General	ROETF	Reactor Operating Experience Task Force
OIS	Office of Information Services	ROP	Reactor Oversight Process
OMB	U.S. Office of Management and Budget	RTM	response technical manual
OPM	· ·	SAT	Senior Assessment Team
	U.S. Office of Personnel Management	SBR	Statement of Budgetary Resources
OSART OUO	Operational Safety Review Team Official Use Only	SDLCM	System Development Life-Cycle Management
PAR	Performance and Accountability Report	SDLCMM	System Development Life-Cycle Management Methodology
PART	Program Assessment Rating Tool	SDP	Significance Determination Process
PBPM	planning, budgeting, and performance management	SECY	Office of the Secretary of the Commission
PC	Personal Computers	SFFAS	Statements of Federal Financial Accounting Standards
PII	personal identifiable information	SGI	Safeguards Information
PL	Public Law	SITSO	· ·
PMM	Project Management Methodology	31130	Senior Information Technology Security Officer
POA&M	plan of action and milestones	SNM	special nuclear material
PRA	Probabilistic Risk Assessment	SUNSI	Sensitive Unclassified Non-Safeguards
PRB	Petition Review Board		Information
PWR	Pressurized Water Reactor	TAC	Technical Assignment Control
RASP	Risk Assessment Standardization	TI	temporary instruction
	Project	TSP	Thrift Savings Plan
RES	Office of Nuclear Regulatory Research	TSTF	Technical Specification Task Force
RIRIP	Risk-Informed Regulation Implementation Plan	USAID	U.S. Agency for International

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